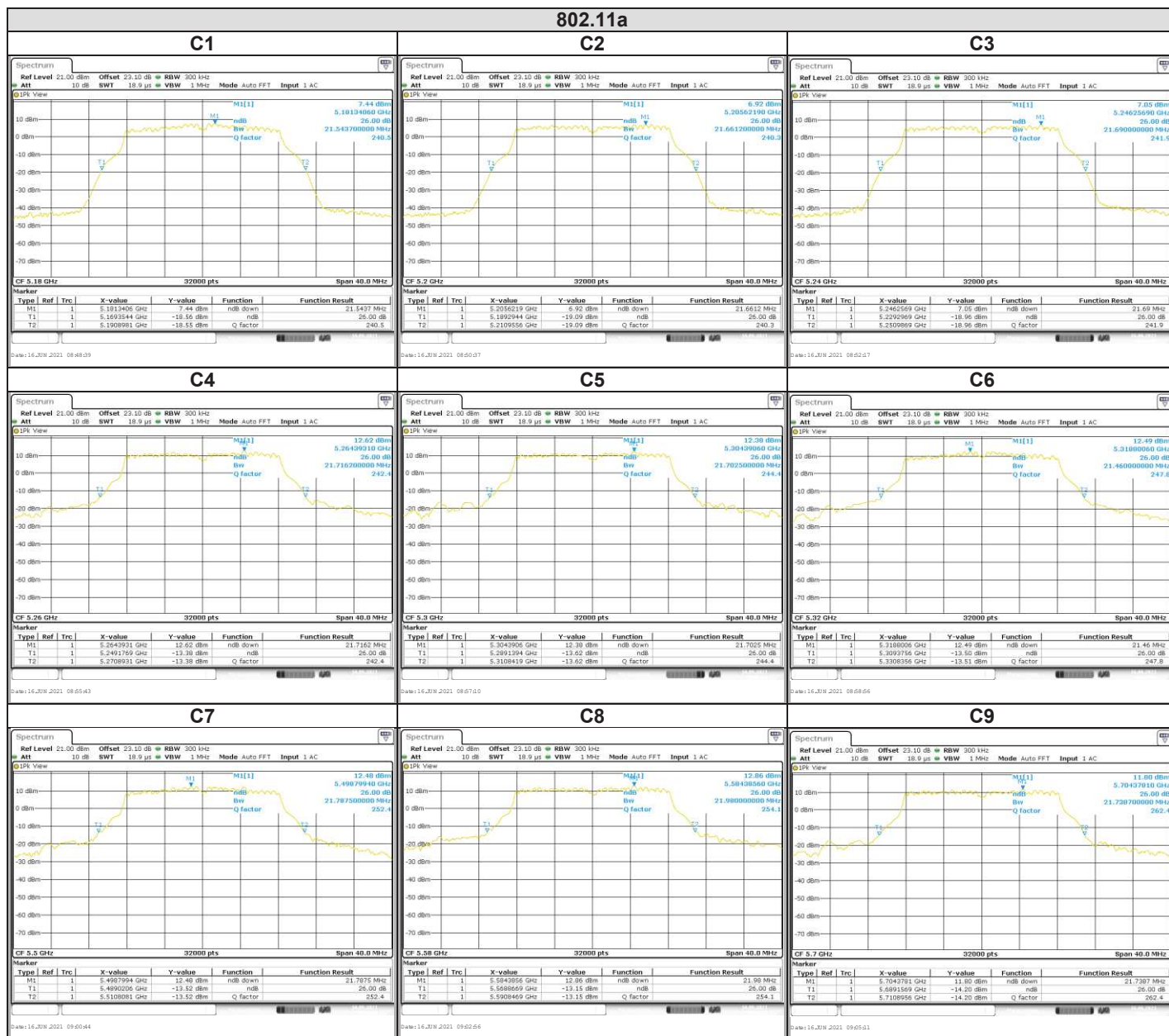
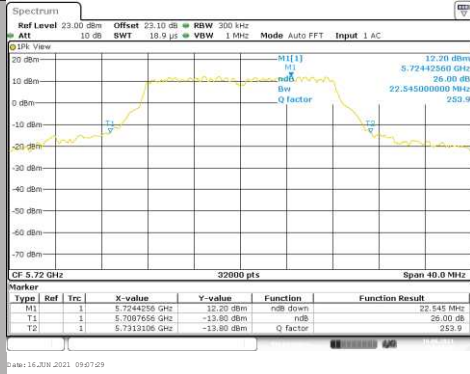


5.5. RESULTS

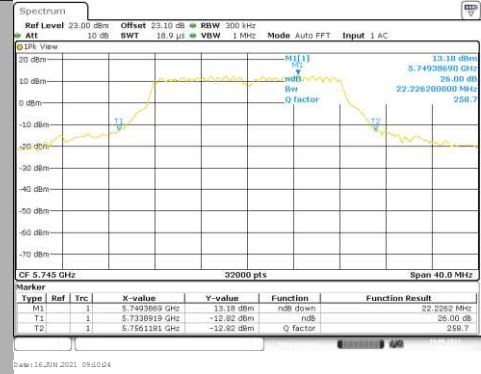


802.11a

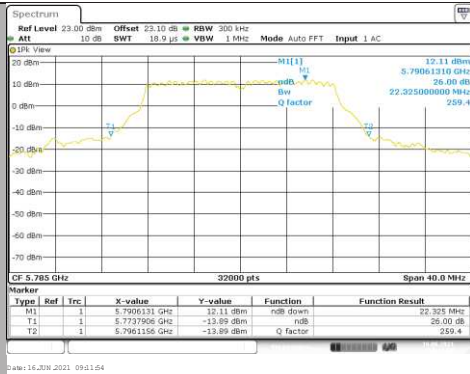
C10



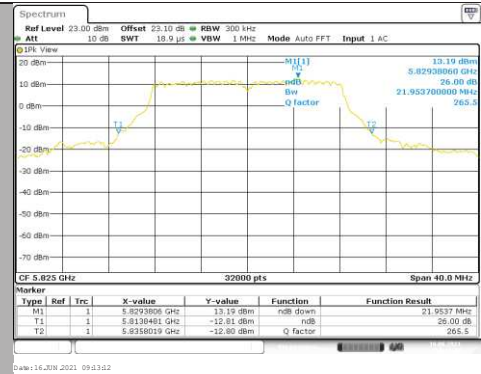
C11



C12



C13



Channel

26dB Emission Bandwidth (MHz)

C1

21.544

C2

21.661

C3

21.690

C4

21.716

C5

21.702

C6

21.460

C7

21.787

C8

21.980

C9

21.739

C10

22.545

C11

22.226

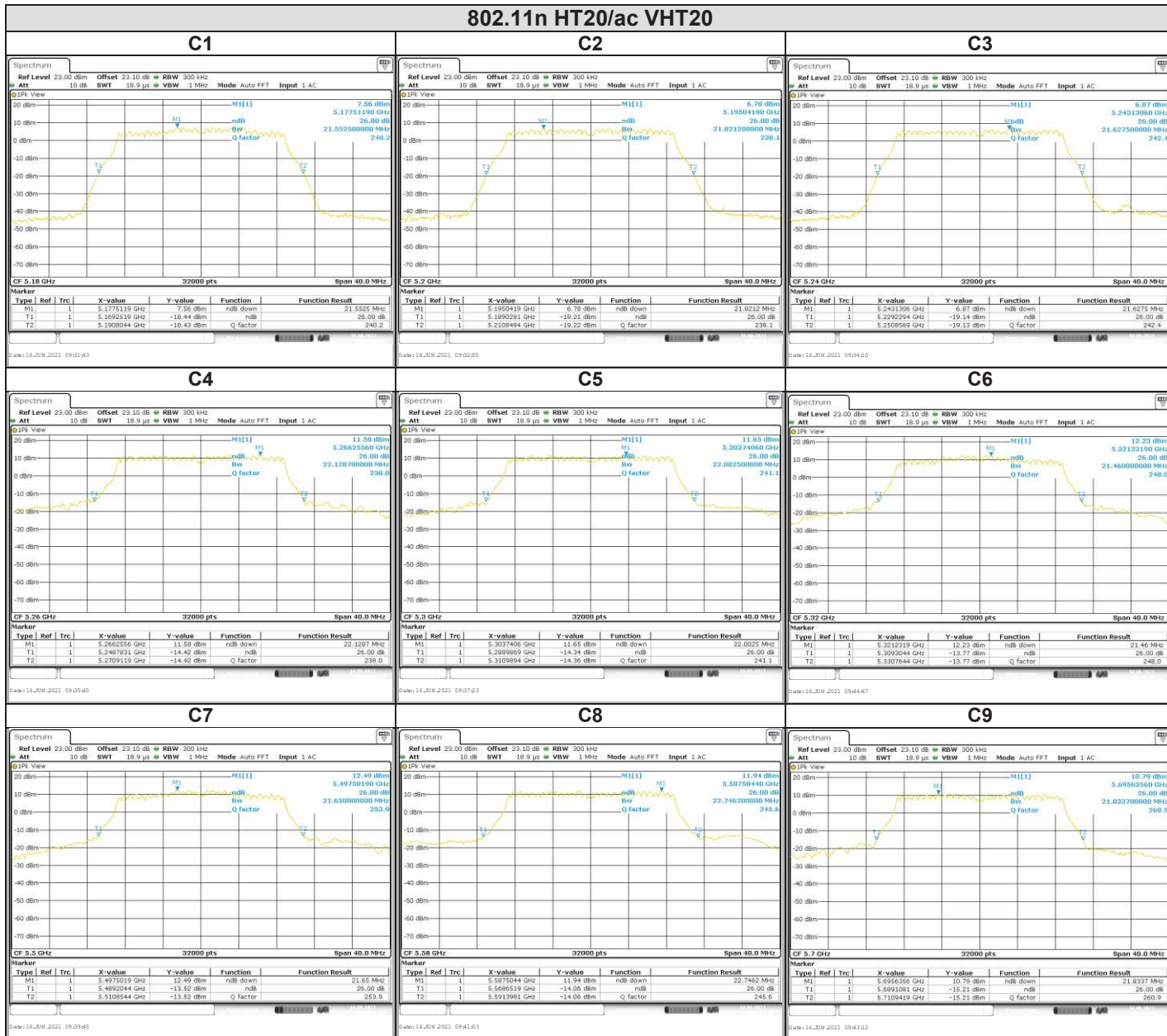
C12

22.325

C13

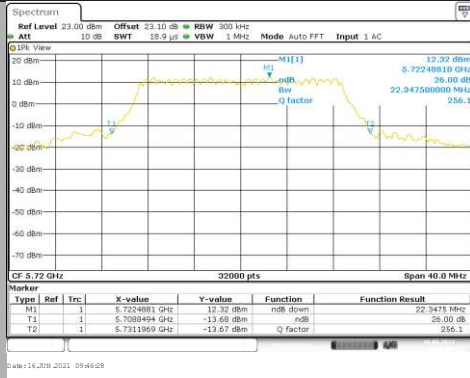
21.954

802.11n HT20/ac VHT20

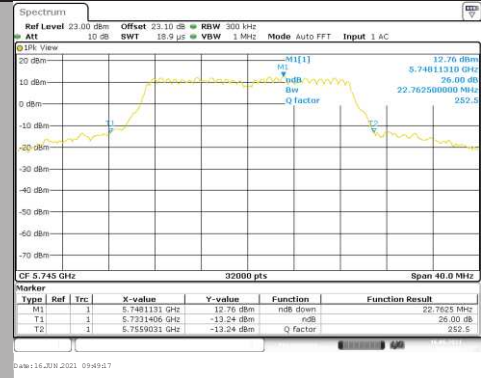


802.11n HT20/ac VHT20

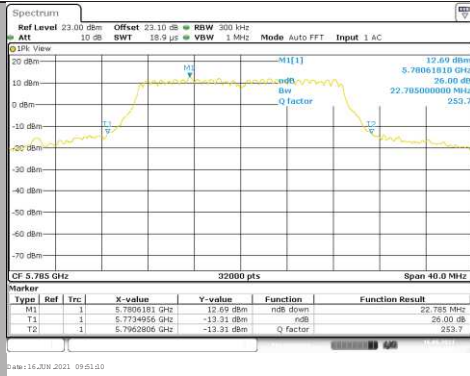
C10



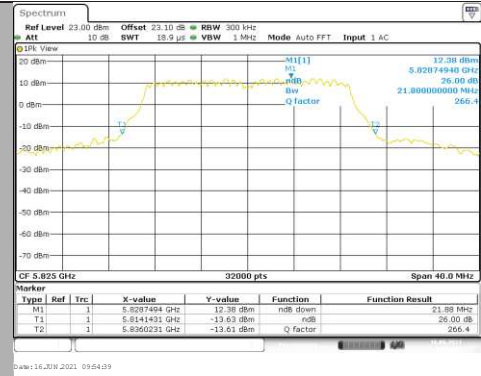
C11



C12



C13



Channel

26dB Emission Bandwidth (MHz)

C1

21.552

C2

21.821

C3

21.627

C4

22.129

C5

22.002

C6

22.460

C7

21.650

C8

21.746

C9

21.834

C10

22.347

C11

22.762

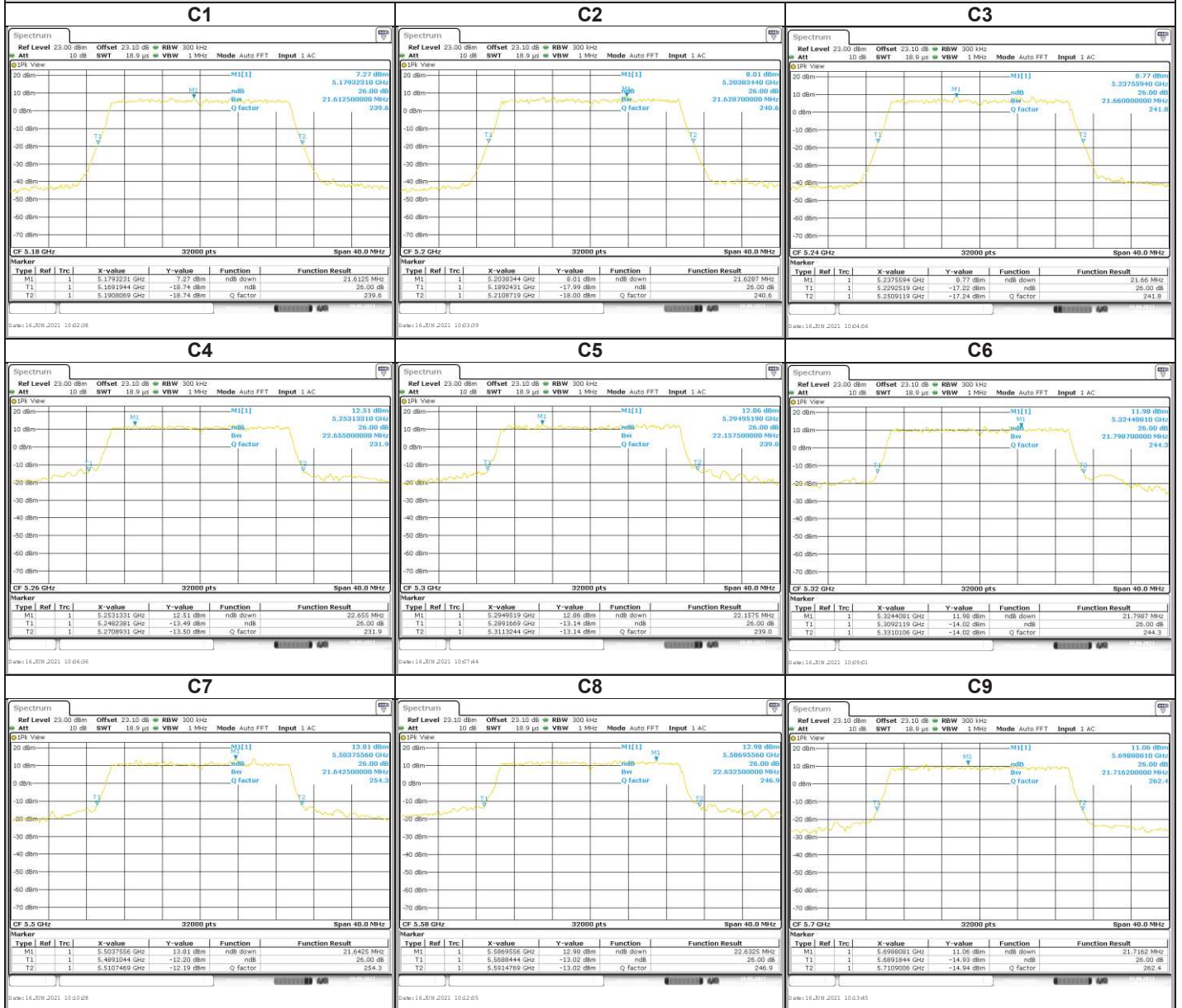
C12

22.785

C13

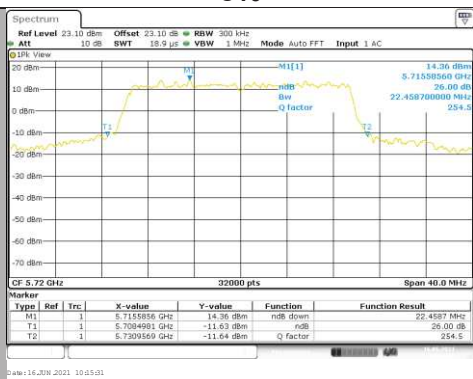
21.880

802.11ax HT20

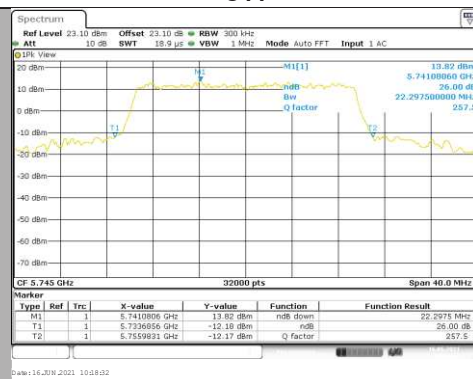


802.11ax HT20

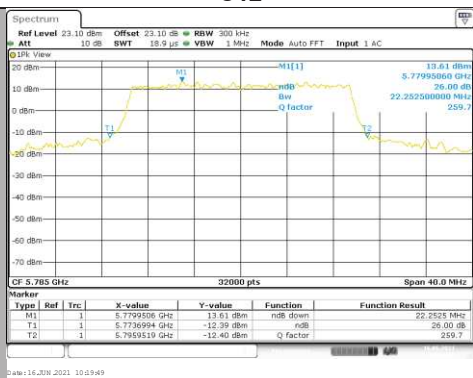
C10



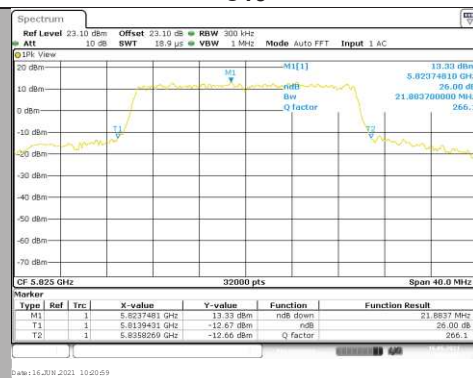
C11



C12



C13



Channel

26dB Emission Bandwidth (MHz)

C1

21.612

C2

21.629

C3

21.660

C4

22.655

C5

22.157

C6

21.799

C7

21.642

C8

22.632

C9

21.716

C10

22.459

C11

22.297

C12

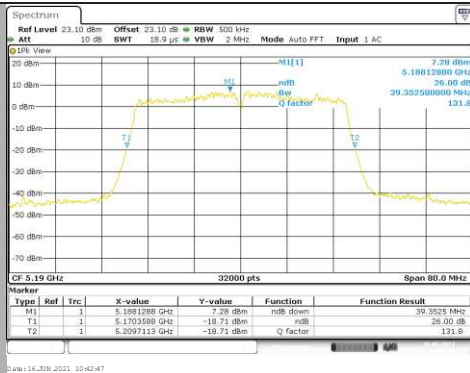
22.252

C13

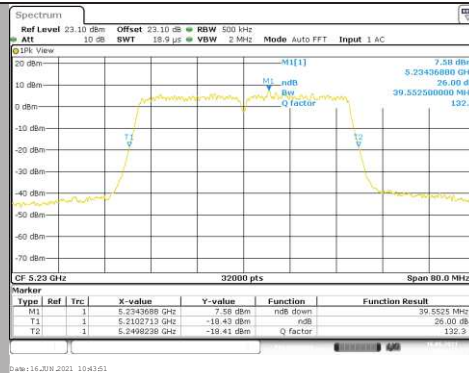
21.884

802.11n HT40/ac VHT40

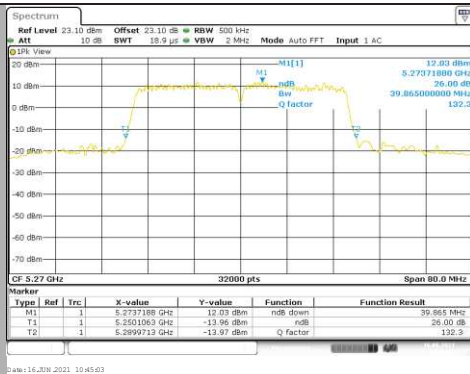
C14



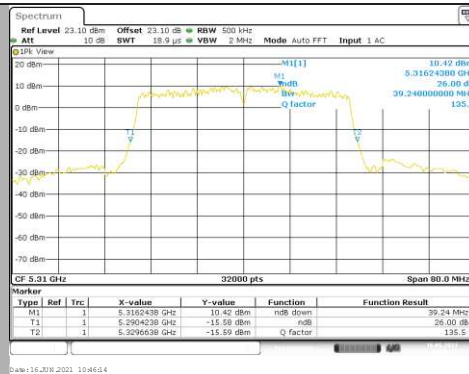
C15



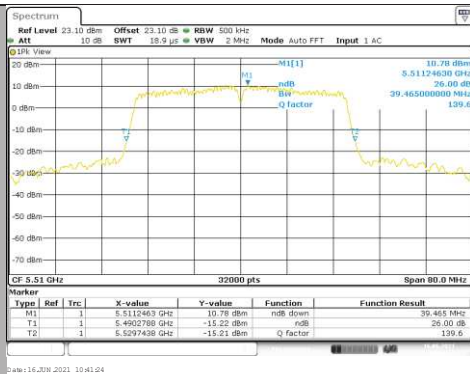
C16



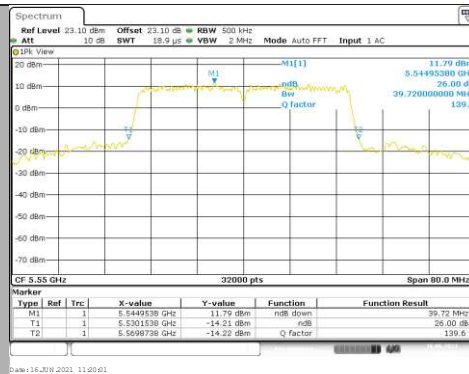
C17



C18

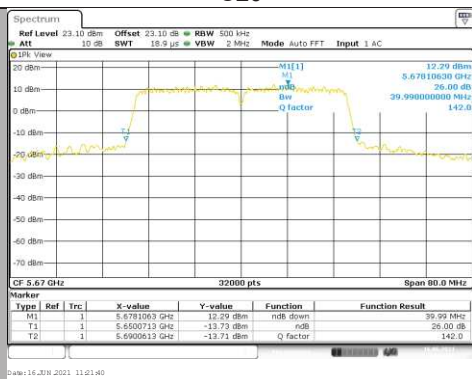


C19

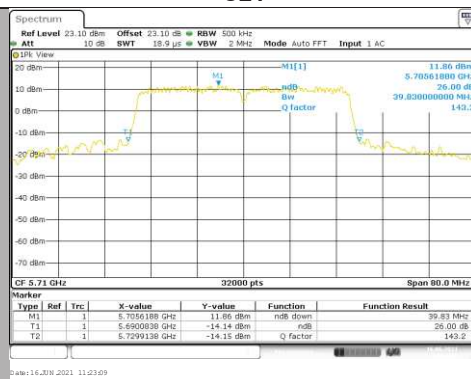


802.11n HT40/ac VHT40

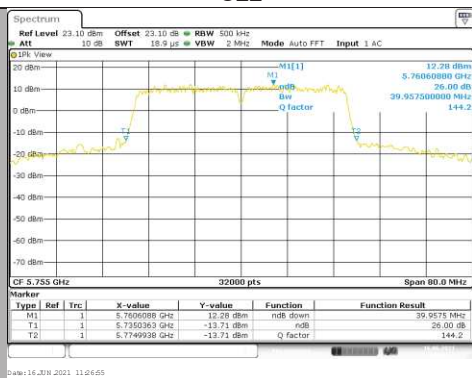
C20



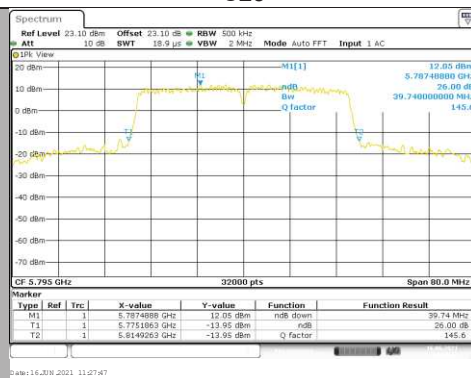
C21



C22



C23



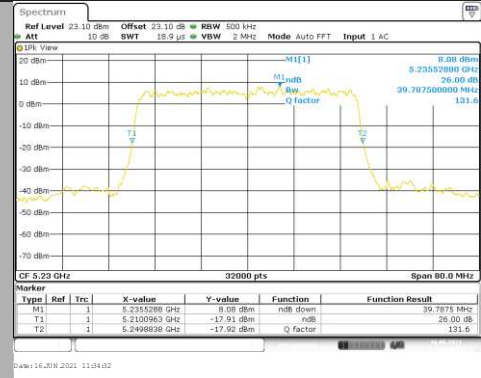
Channel	26dB Emission Bandwidth (MHz)
C14	39.352
C15	39.552
C16	39.865
C17	39.240
C18	39.465
C19	39.720
C20	39.990
C21	39.830
C22	39.957
C23	39.740

802.11ax HT40

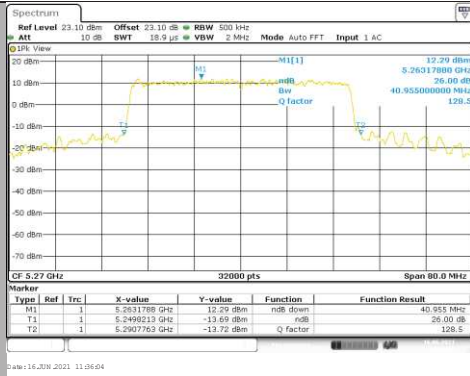
C14



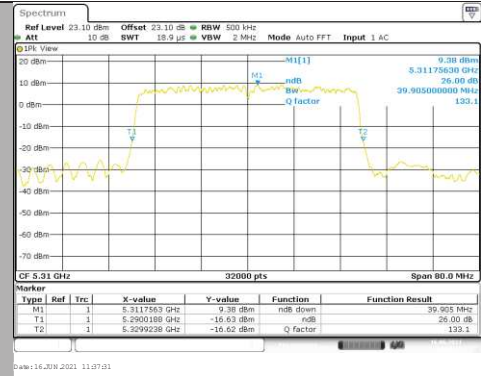
C15



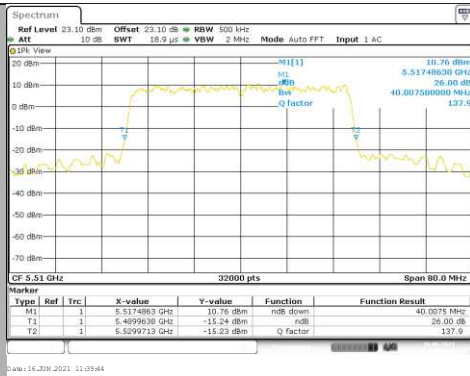
C16



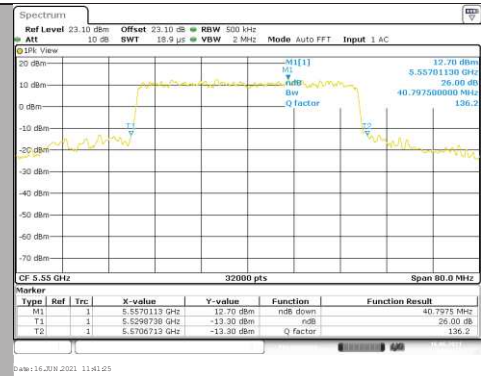
C17



C18

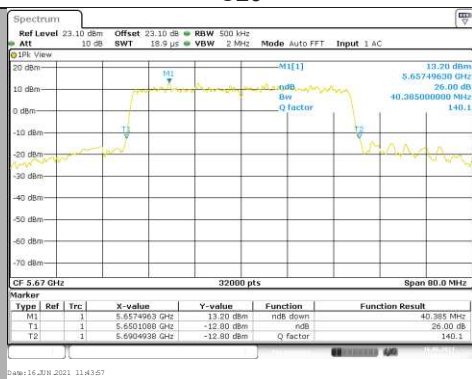


C19

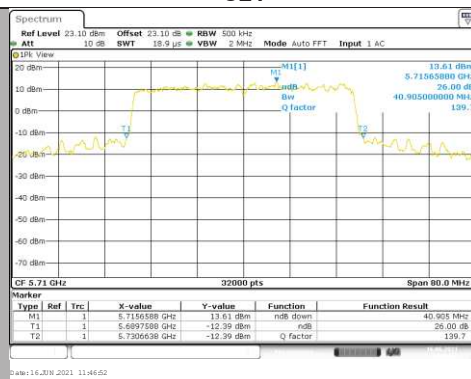


802.11ax HT40

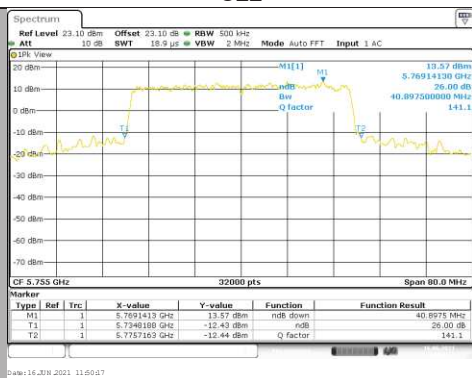
C20



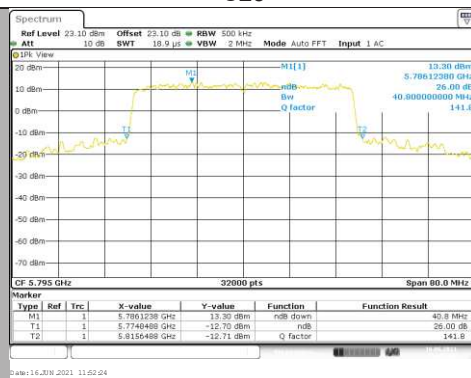
C21



C22



C23



Channel	26dB Emission Bandwidth (MHz)
C14	40.060
C15	39.787
C16	40.955
C17	39.905
C18	40.007
C19	40.797
C20	40.385
C21	40.905
C22	40.897
C23	40.800

802.11ac VHT80

C24



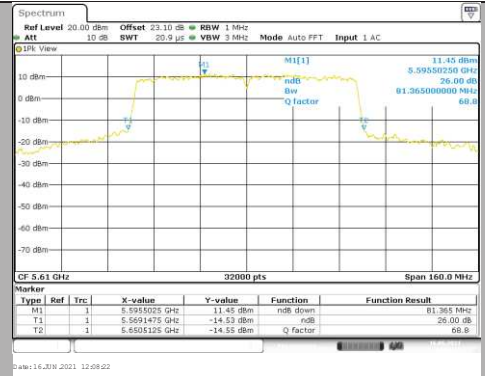
C25



C26

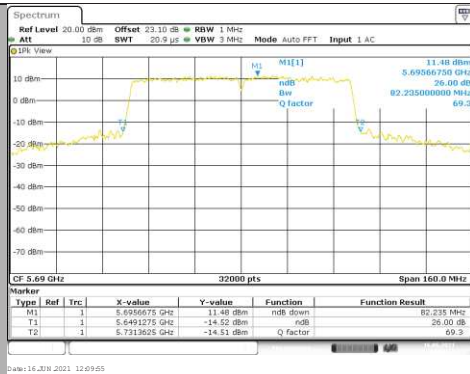


C27

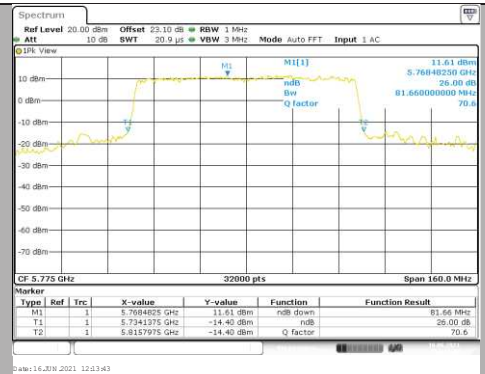


802.11ac VHT80

C28



C29



Channel

26dB Emission Bandwidth (MHz)

C24

80.470

C25

80.775

C26

80.575

C27

81.365

C28

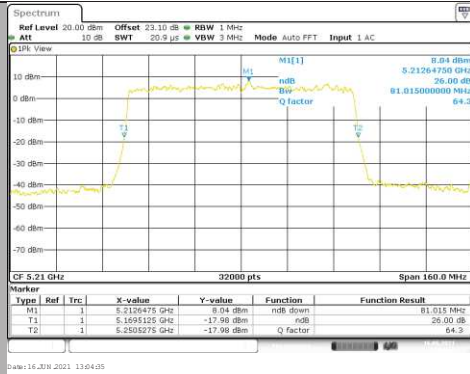
82.235

C29

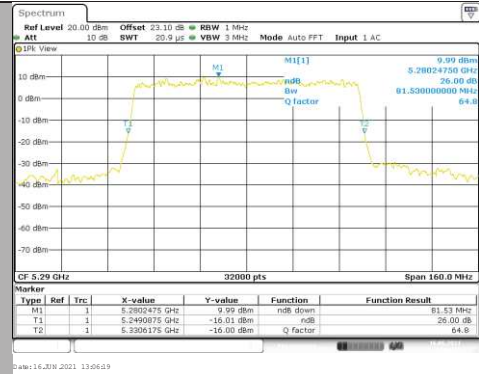
81.660

802.11ax VHT80

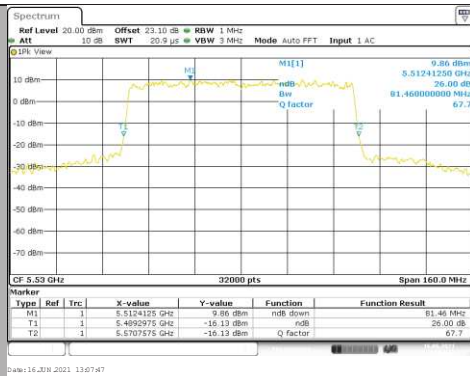
C24



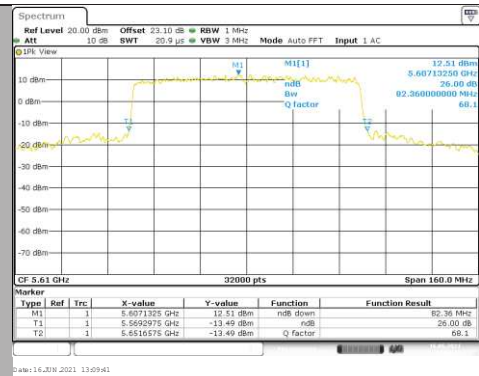
C25



C26

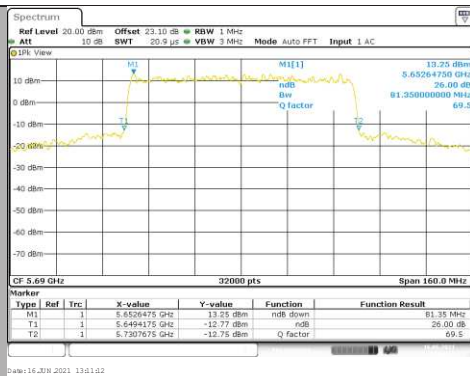


C27

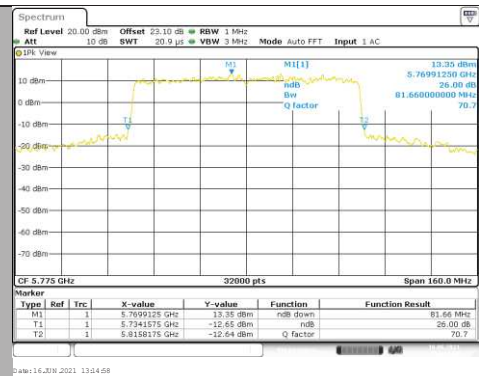


802.11ax VHT80

C28



C29



Channel

26dB Emission Bandwidth (MHz)

C24

81.015

C25

81.530

C26

81.460

C27

82.360

C28

81.350

C29

81.660



5.6. CONCLUSION

26dB Emission Bandwidth measurement performed on the sample of the product **COGECO DIW3930 COGECO**, SN: **6211130035003**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407 & RSS 247 ISSUE 2** limits.

6. 6dB EMISSION BANDWIDTH

6.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : June 16, 2021
Ambient temperature : 25°C
Relative humidity : 44%

6.2. TEST SETUP

- The Equipment Under Test is installed:

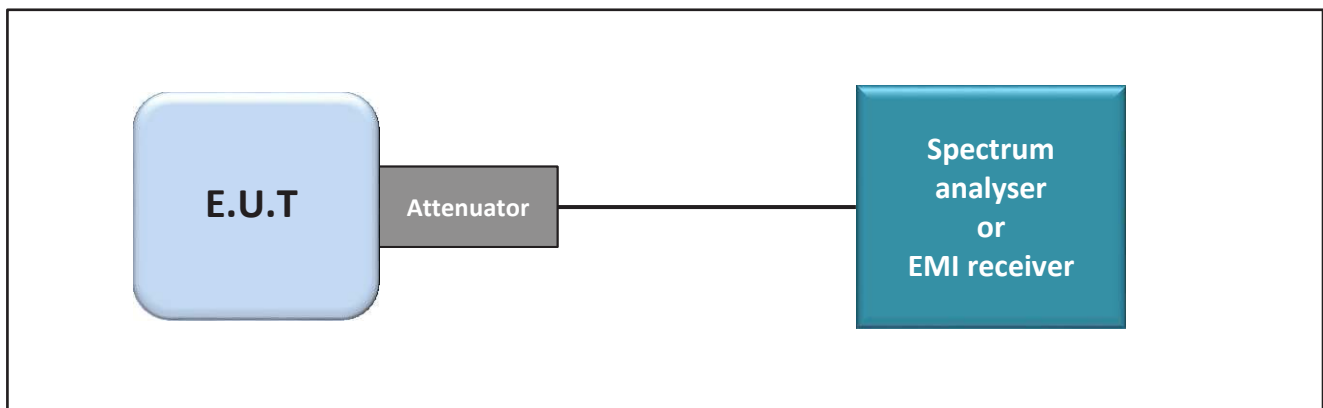
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

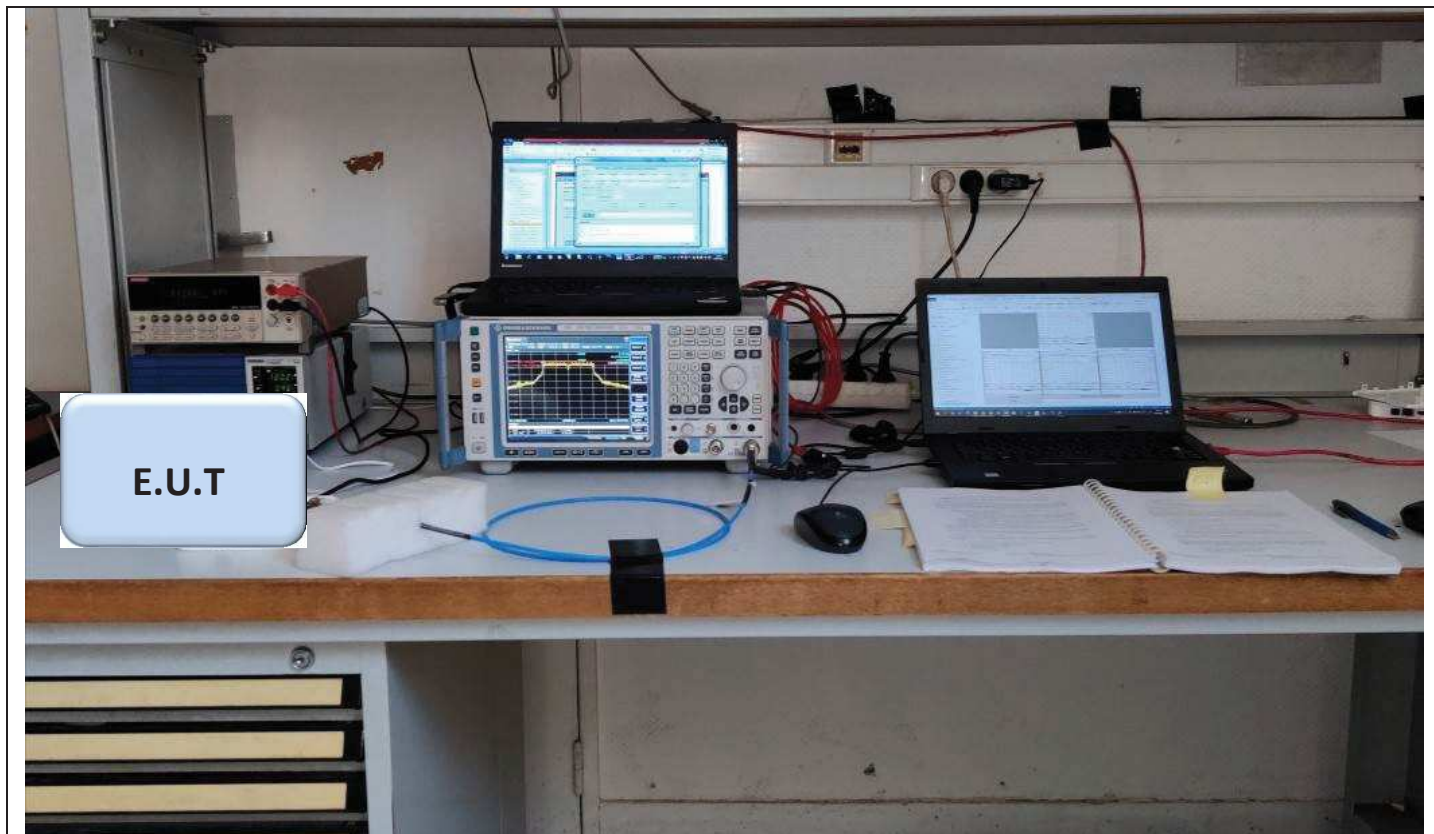
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § C2



Test set up of 6dB Emission Bandwidth



Photograph for 6dB emission bandwidth

6.3. LIMIT

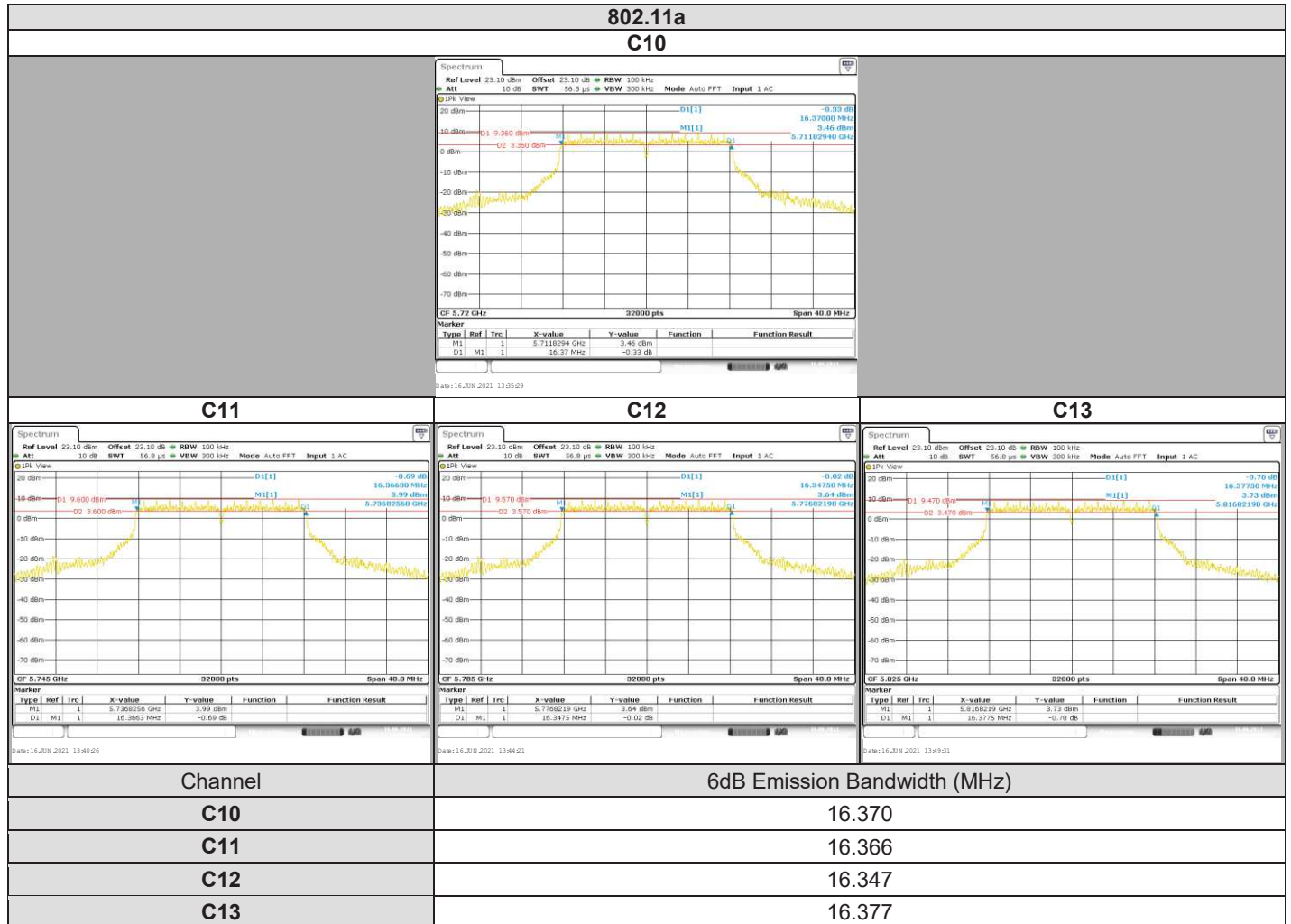
The 6dB bandwidth shall be at least 500kHz

6.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2020/09	2021/09
Power supply	KIKUSUI	PCR500M	A7049006	See Multimeter	See Multimeter
Multimeter	KEITHLEY	2000	A1242090	2021/03	2023/03
R&S Commander Software	ROHDE & SCHWARZ	Version 1,6,4	-	-	-
Load 50 ohms	TELEGARTNER	-	A7150103	2021/04	2023/04
Load 50 ohms	TELEGARTNER	-	A7150104	2021/04	2023/04

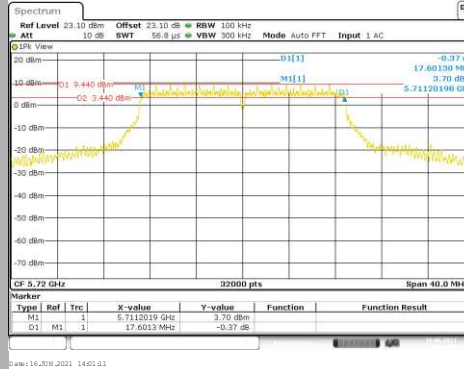
Note: In our quality system, the test equipment calibration due is more & less 2 months

6.5. RESULTS

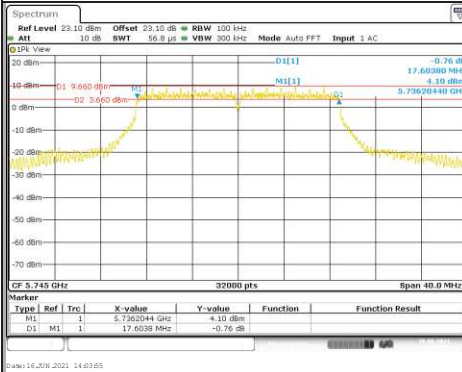


802.11n HT20/ac VHT20

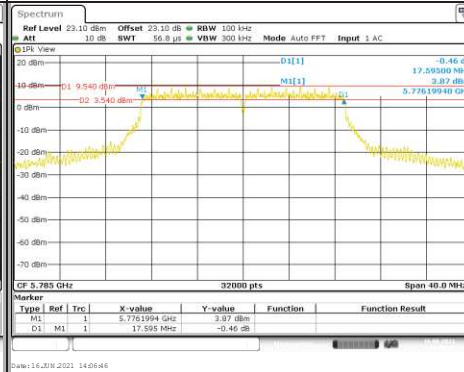
C10



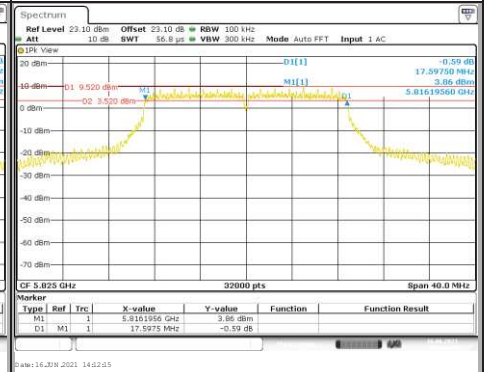
C11



C12



C13



Channel

6dB Emission Bandwidth (MHz)

C10

17.601

C11

17.604

C12

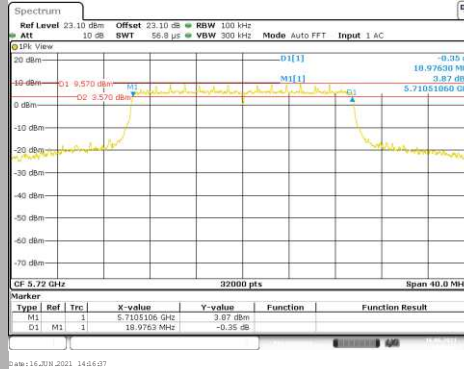
17.595

C13

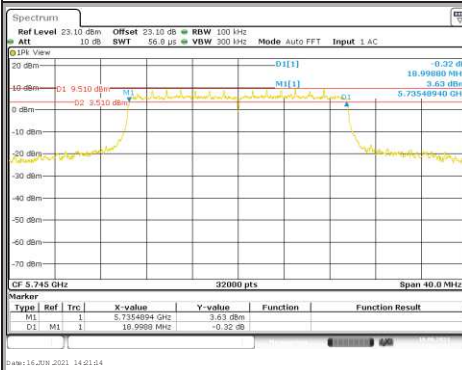
17.597

802.11ax HT20

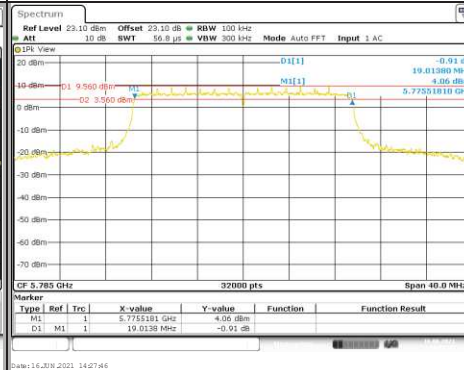
C10



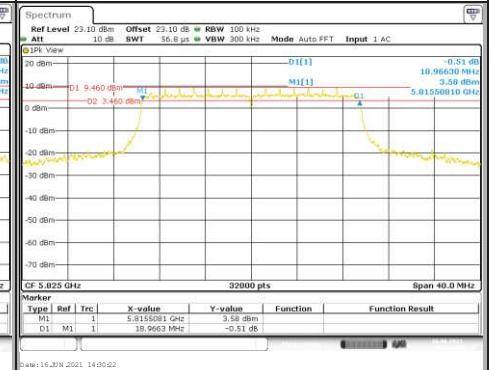
C11



C12



C13



Channel

6dB Emission Bandwidth (MHz)

C10

18.976

C11

18.999

C12

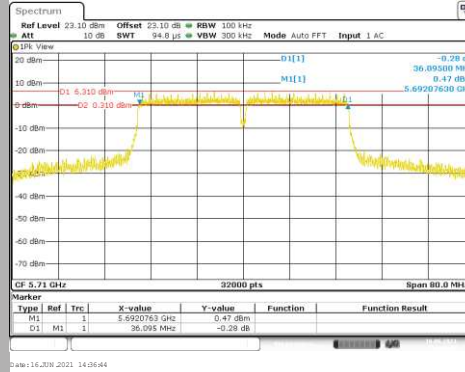
19.014

C13

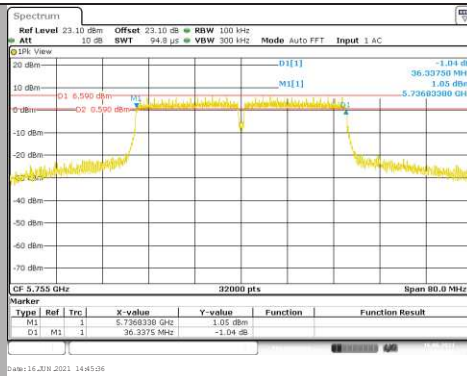
18.966

802.11n HT40/ac VHT40

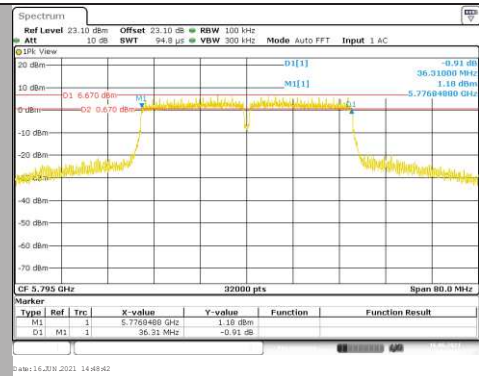
C21



C22



C23



Channel

6dB Emission Bandwidth (MHz)

C21

36.095

C22

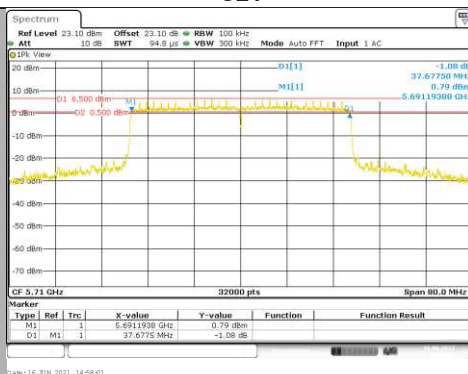
36.337

C23

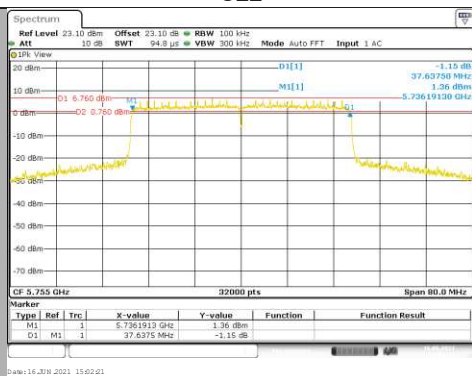
36.310

802.11ax HT40

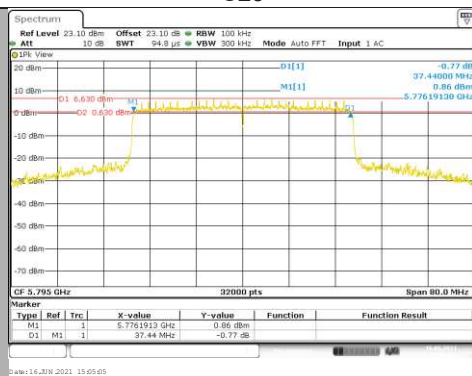
C21



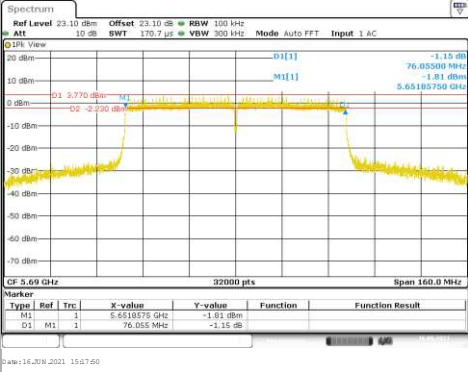
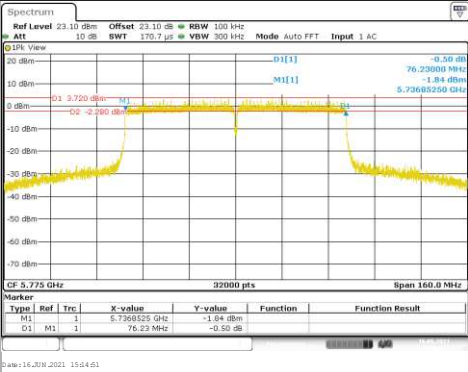
C22



C23

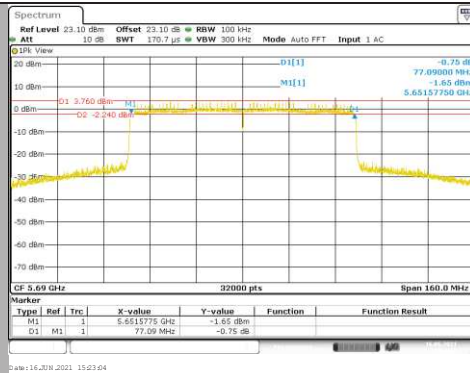


Channel	6dB Emission Bandwidth (MHz)
C21	37.677
C22	37.637
C23	37.440

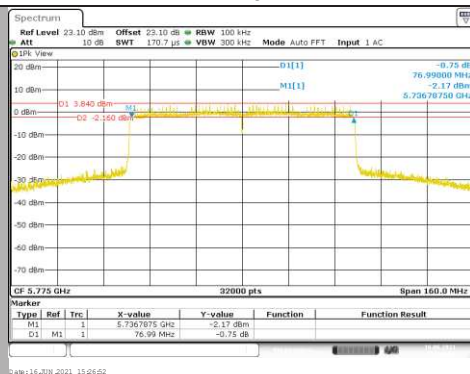
802.11ac VHT80	
C28	
	
C29	
	
Channel	6dB Emission Bandwidth (MHz)
C28	76.055
C29	76.230

802.11ax VHT80

C28



C29



Channel	6dB Emission Bandwidth (MHz)
C28	77.090
C29	76.990

6.6. CONCLUSION

6dB Emission Bandwidth measurement performed on the sample of the product **COGECO DIW3930 COGECO**, SN: **6211130035003**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407 & RSS 247 ISSUE 2** limits.

7. DUTY CYCLE

7.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : June 7, 2021
Ambient temperature : 24°C
Relative humidity : 42%

7.2. TEST SETUP

- The Equipment Under Test is installed:

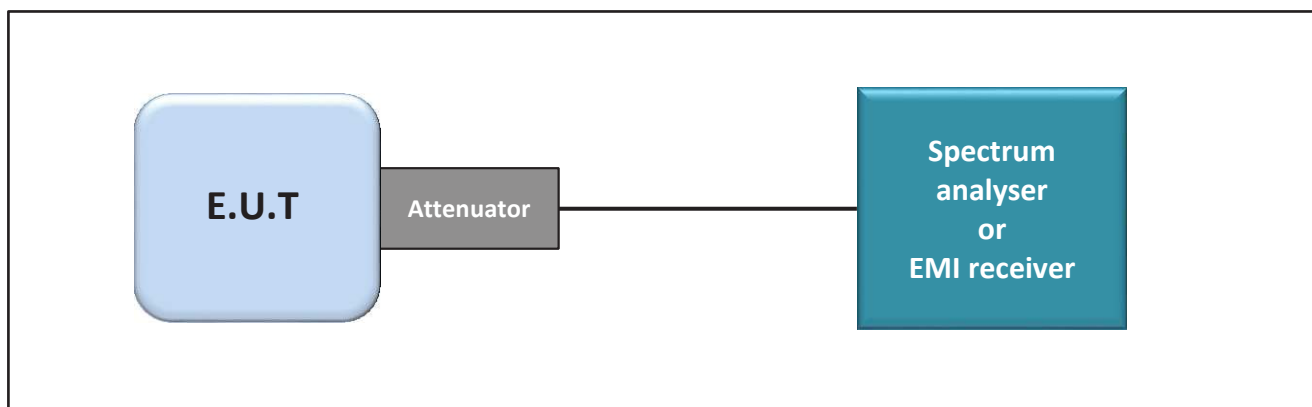
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

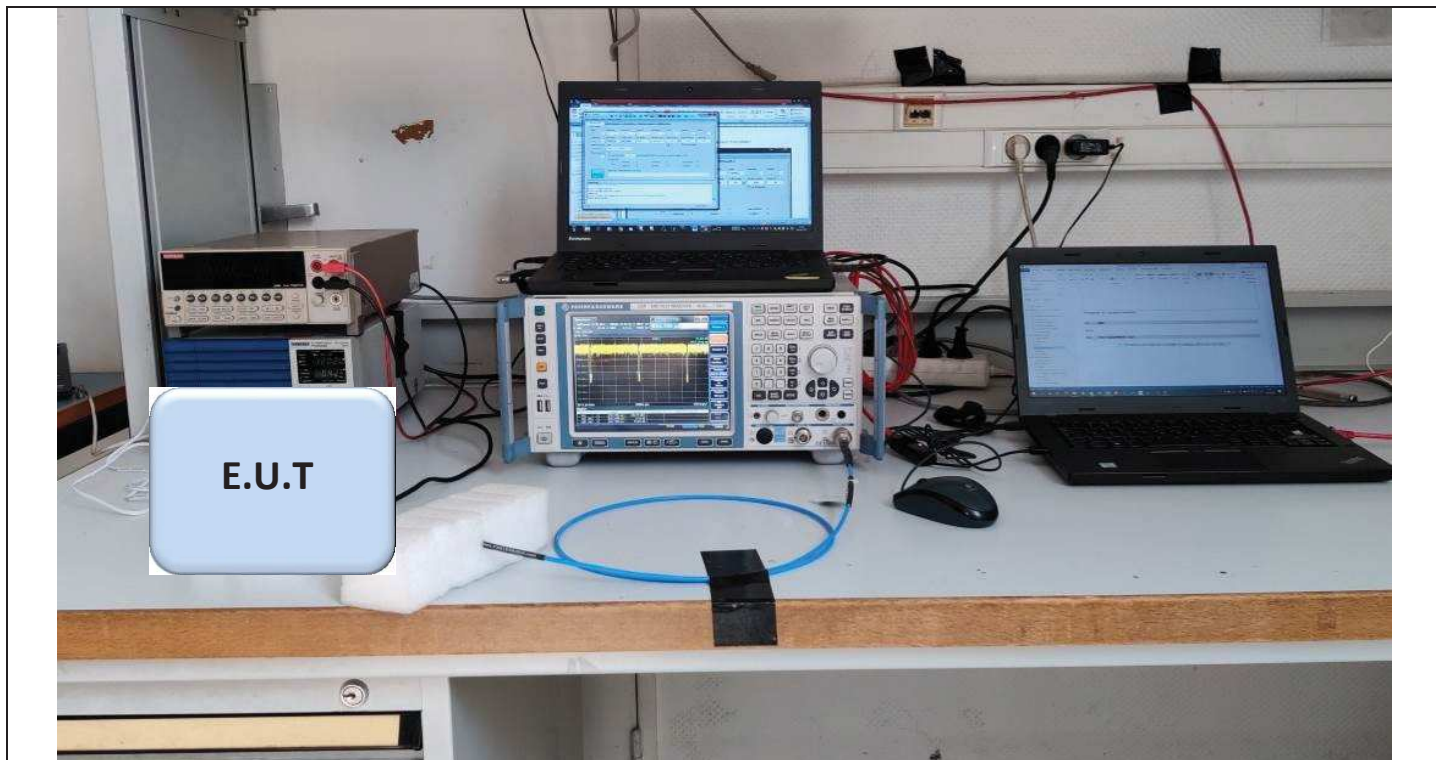
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

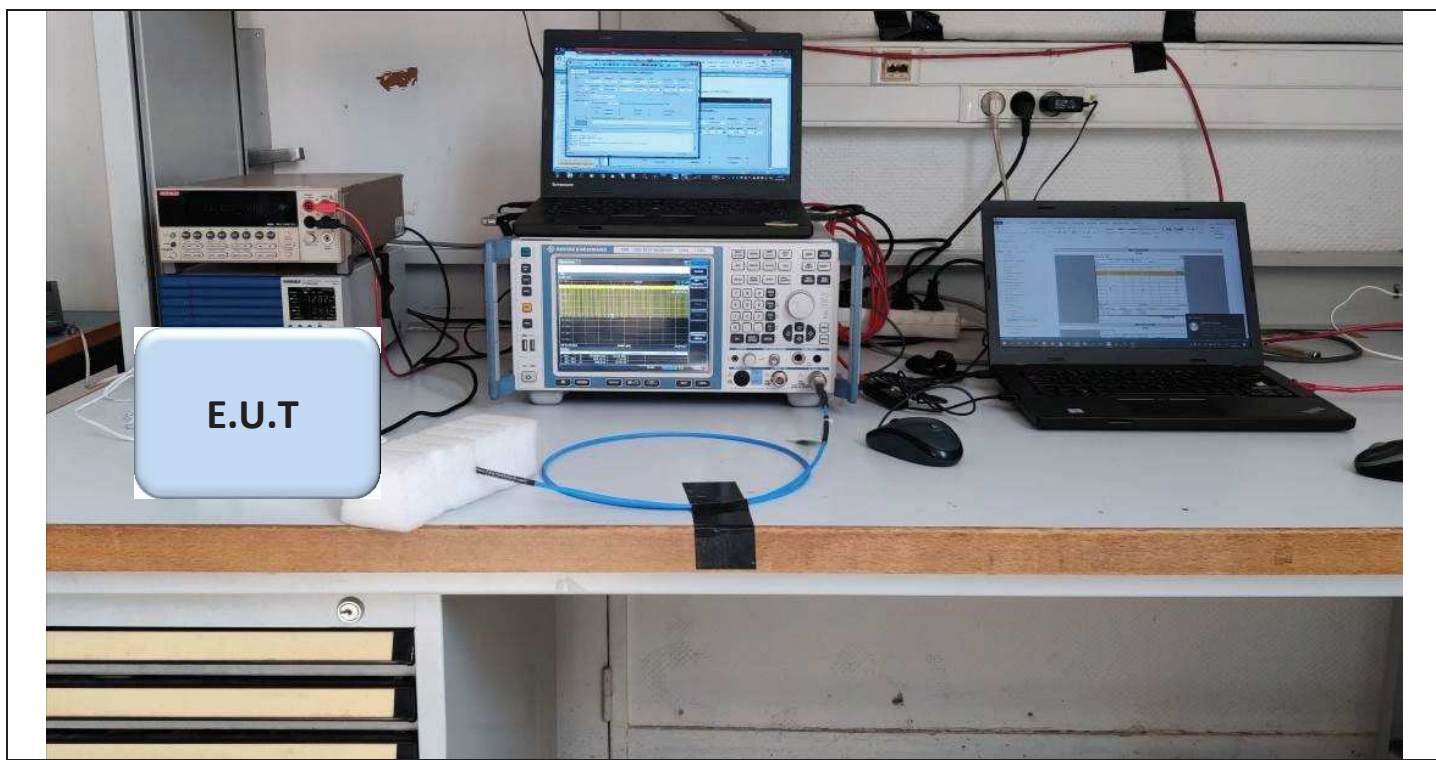
- ☒ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § B2 b)



Test set up of Duty Cycle



Photograph for Duty Cycle



Photograph for Duty Cycle



7.3. LIMIT

None

7.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2020/09	2021/09
Power supply	KIKUSUI	PCR500M	A7049006	See Multimeter	See Multimeter
Multimeter	KEITHLEY	2000	A1242090	2021/03	2023/03
R&S Commander Software	ROHDE & SCHWARZ	Version 1,6,4	-	-	-
Load 50 ohms	TELEGARTNER	-	A7150103	2021/04	2023/04
Load 50 ohms	TELEGARTNER	-	A7150104	2021/04	2023/04

Note: In our quality system, the test equipment calibration due is more & less 2 months

7.5. RESULTS



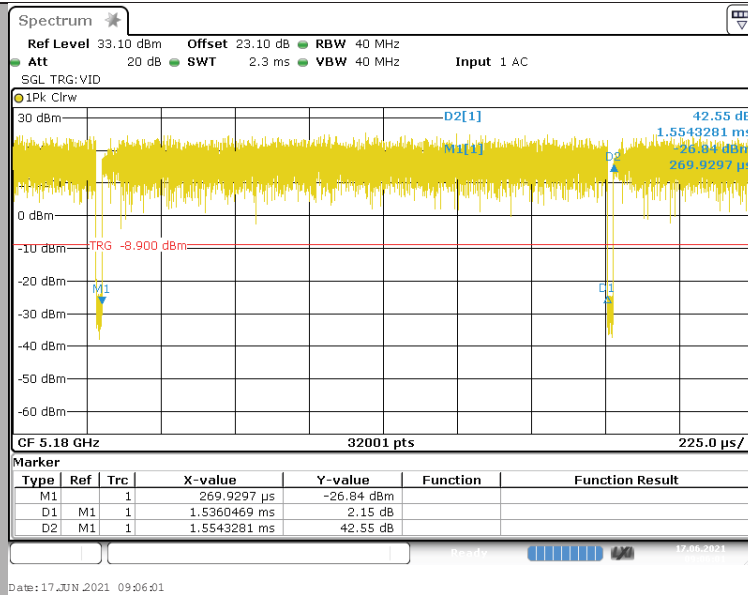




L C I E

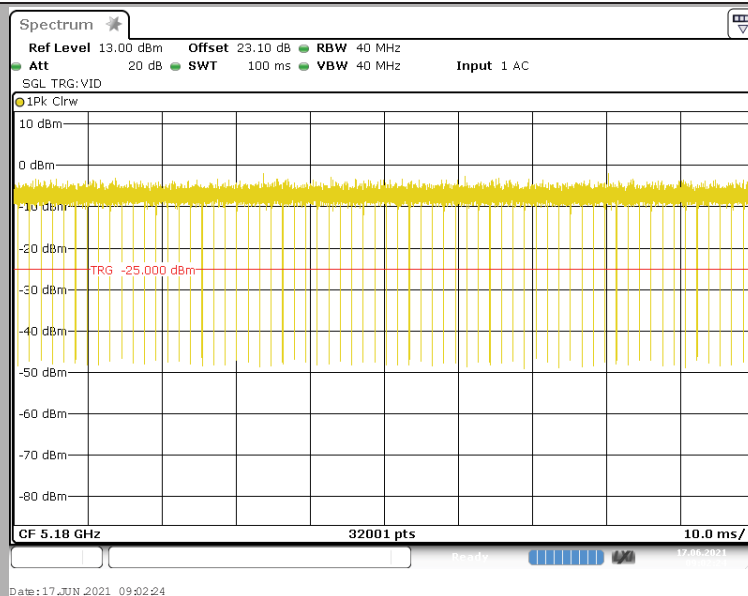
802.11ax HT20

C1



802.11ax HT20

C1



Mode

802.11ax HT20

Duty Cycle (%)

98.823

Duty Cycle Correction (dB)

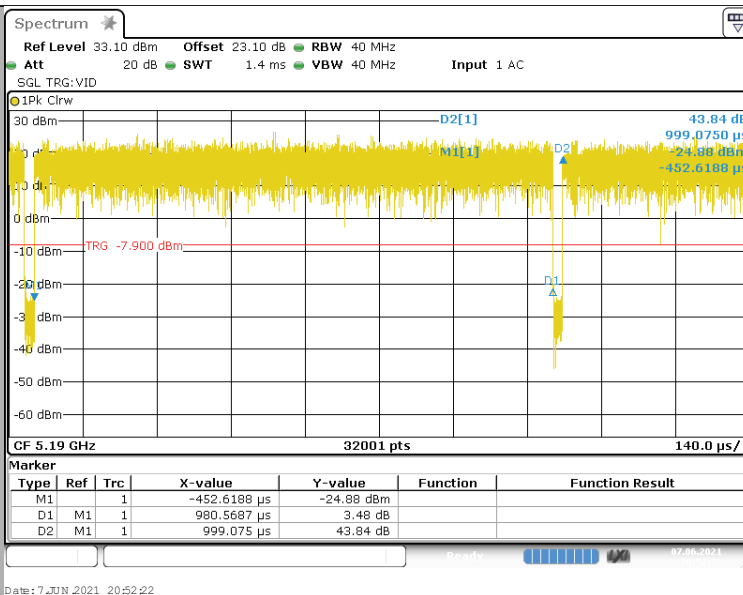
$$20\log\left(\frac{1}{\text{duty cycle}}\right) = 0.103$$



LCIE

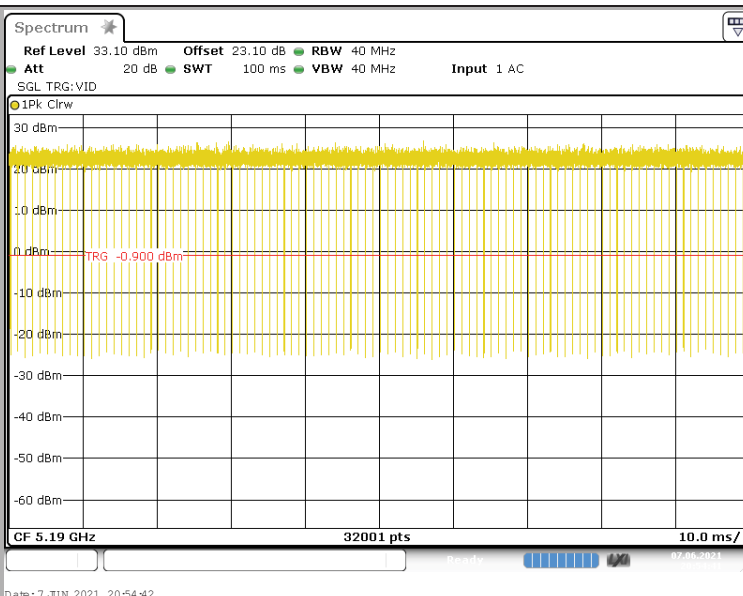
802.11n HT40/ac VHT40

C14



802.11n HT40/ac VHT40

C14



Mode

Duty Cycle (%)

Duty Cycle Correction (dB)

802.11n HT40/ac VHT40

98.147

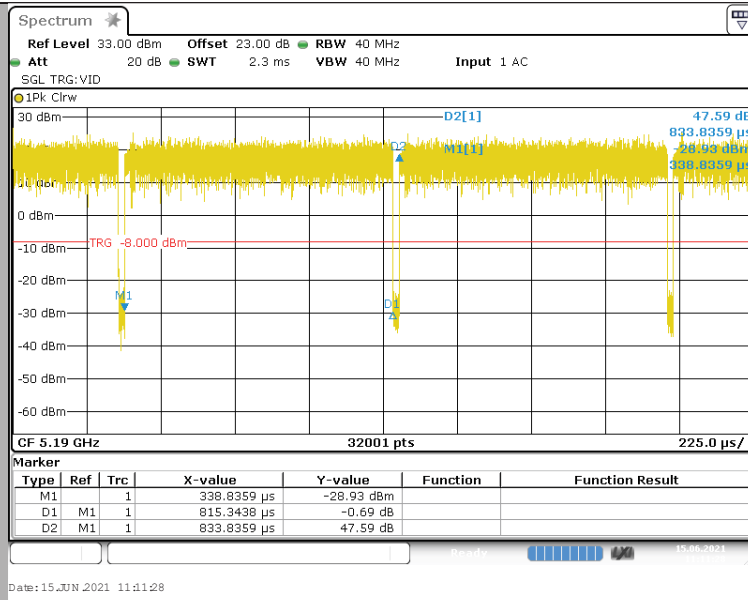
$20\log\left(\frac{1}{\text{duty cycle}}\right) = 0.1624$



L C I E

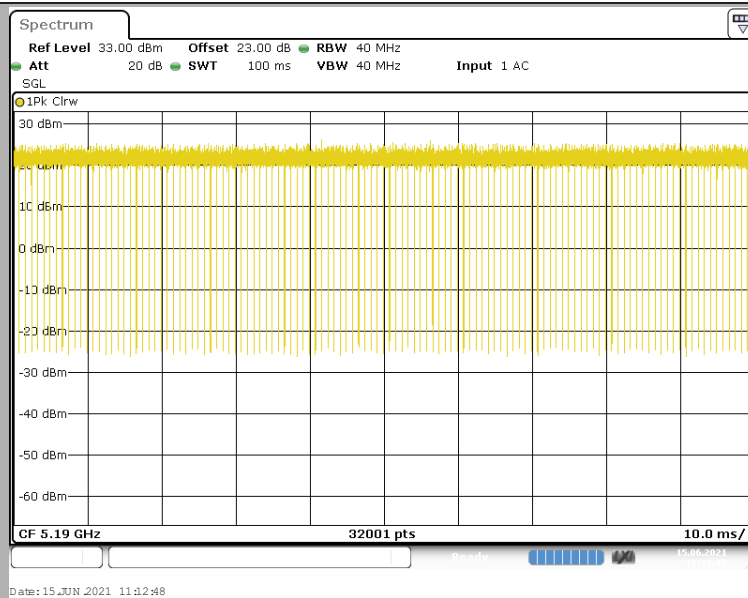
802.11ax HT40

C14



802.11ax HT40

C14



Mode

Duty Cycle (%)

Duty Cycle Correction (dB)

802.11ax HT40

97.782

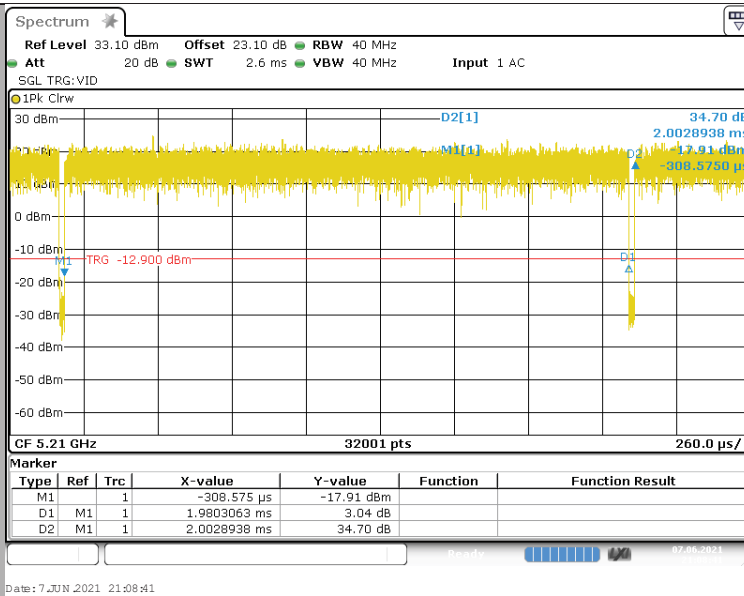
$20\log\left(\frac{1}{\text{duty cycle}}\right) = 0.1948$



L C I E

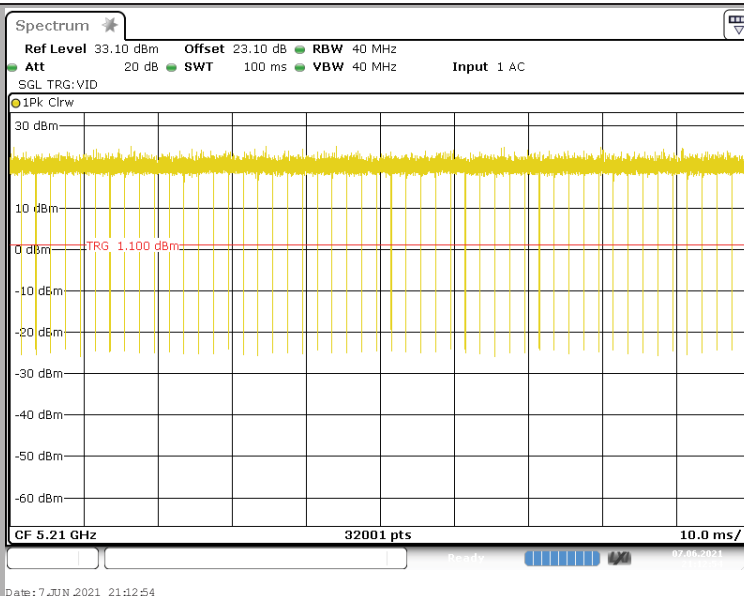
802.11ac VHT80

C24



802.11ac VHT80

C24



Mode

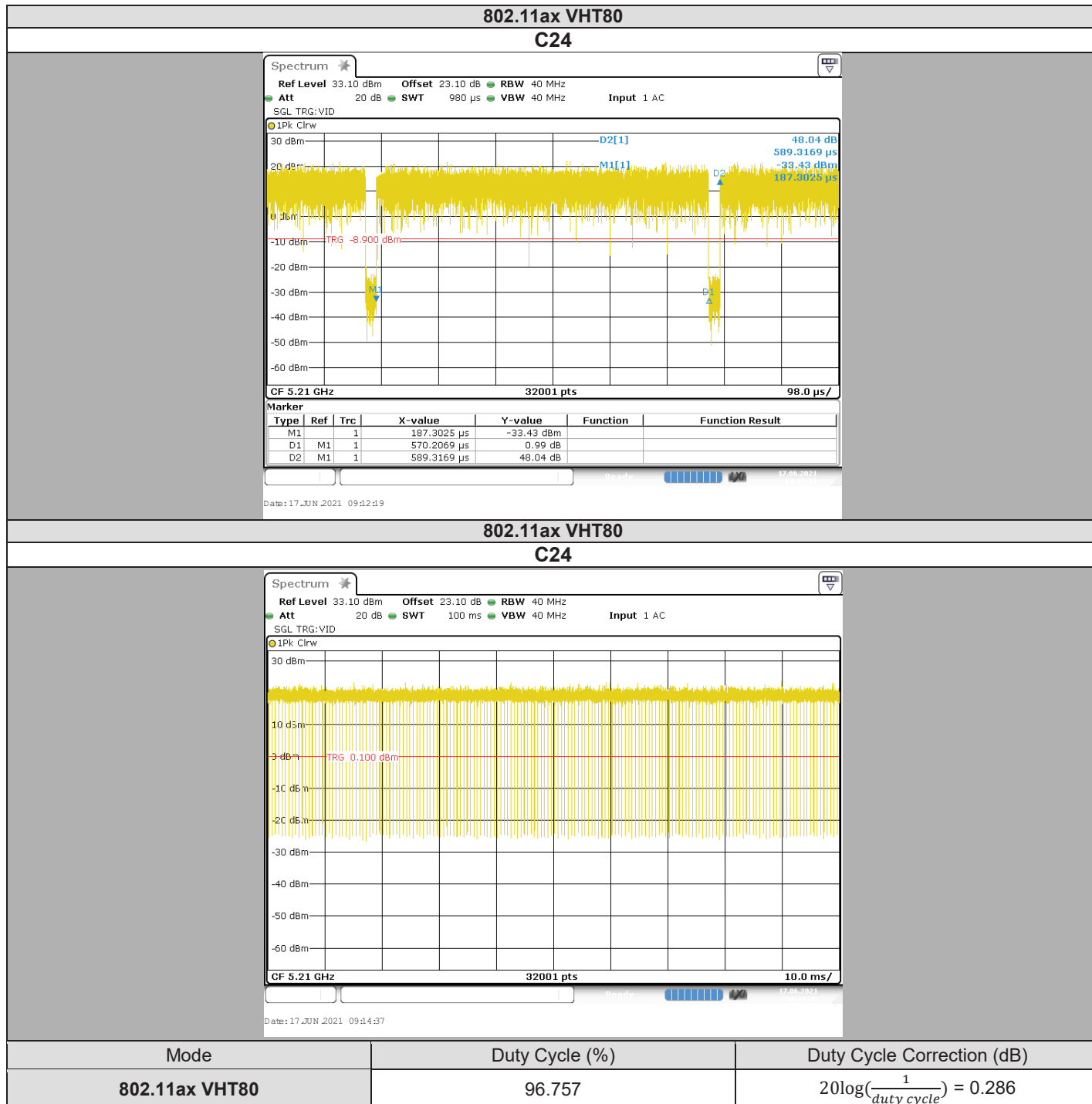
Duty Cycle (%)

Duty Cycle Correction (dB)

802.11ac VHT80

98.872

$20\log\left(\frac{1}{\text{duty cycle}}\right) = 0.0985$



7.6. CONCLUSION

Duty Cycle measurement performed on the sample of the product **COGECO DIW3930 COGECO**, SN: **6211130035003**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407 & RSS 247 ISSUE 2** limits.

8. MAXIMUM CONDUCTED OUTPUT POWER, MAXIMUM POWER SPECTRAL DENSITY, MAXIMUM EIRP, MAXIMUM EIRP SPECTRAL DENSITY

8.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : June 17, 2021 to June 22, 2021
Ambient temperature : 27°C & 25°C
Relative humidity : 46% & 48%

8.2. TEST SETUP

- The Equipment Under Test is installed:

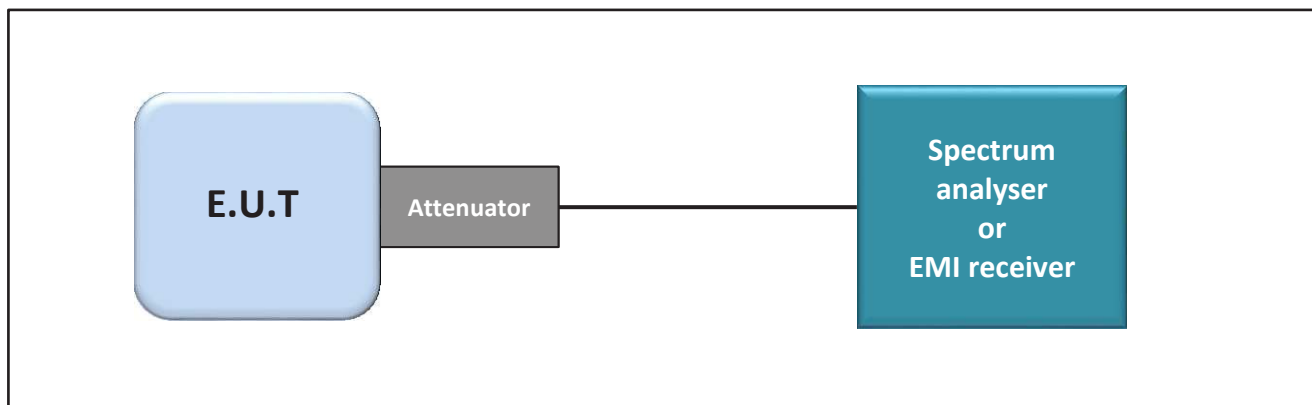
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

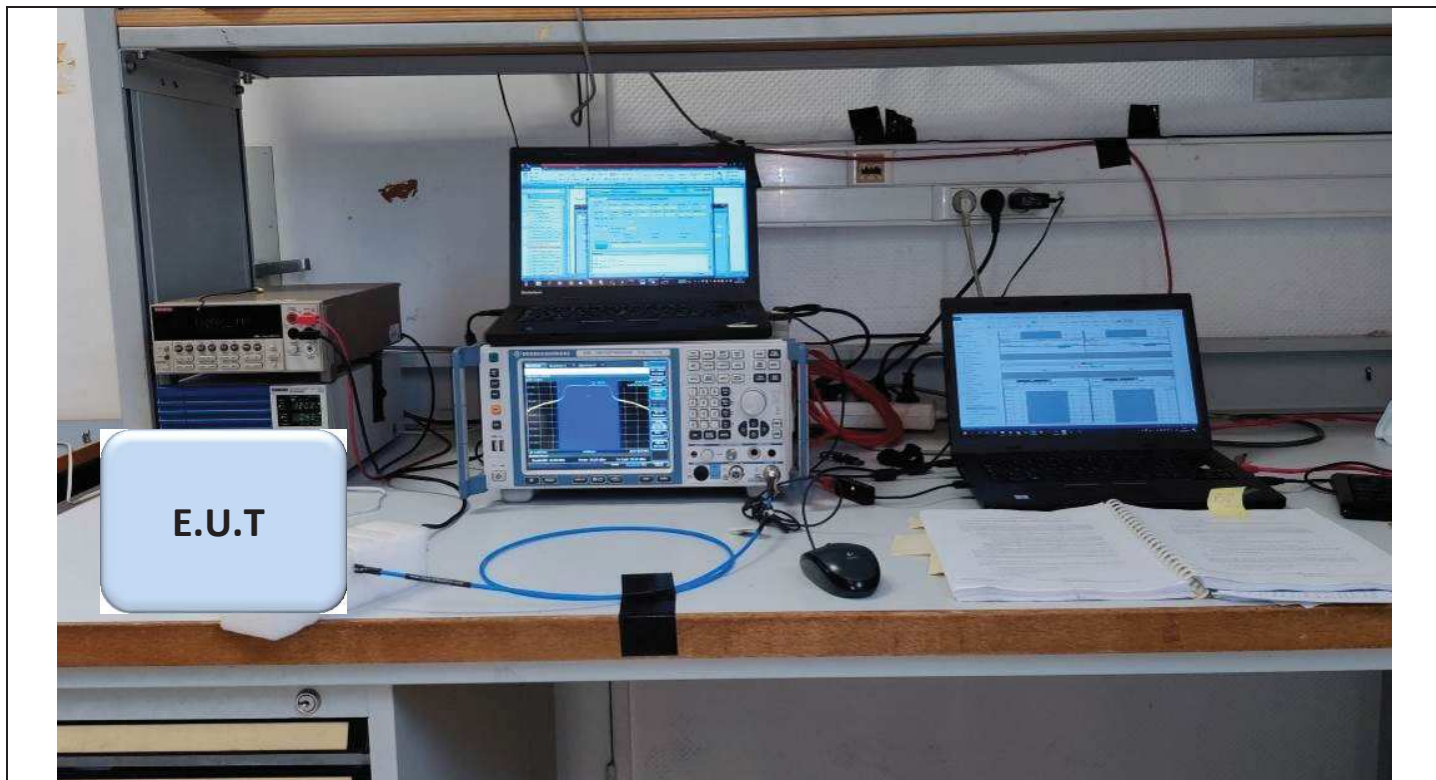
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § E2 b) (Method SA-1) & F
- ☒ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § E2 c) (Method SA-2) & F
- ☒ KDB 662911 D01 Multiple Transmitter Output v02r01



Test set up of Maximum Conducted Output Power



Photograph for Maximum Conducted Output Power



8.3. LIMIT

FCC Part 15.407

Maximum Conducted Output power:

5150MHz-5250MHz: Shall not exceed 30dBm for Indoor Access Point devices & 24dBm for Client devices

5250MHz-5350MHz: Shall not exceed 24dBm or 11dBm +10*log (-26dB Bandwidth (MHz))

5470MHz-5725MHz: Shall not exceed 24dBm or 11dBm +10*log (-26dB Bandwidth (MHz))

5725MHz-5850MHz: Shall not exceed 30dBm

Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

Maximum Power Spectral Density:

5150MHz-5250MHz: Shall not exceed 17dBm/MHz for Indoor Access Point & 11dBm/MHz for Client devices

5250MHz-5350MHz: Shall not exceed 11dBm/MHz

5470MHz-5725MHz: Shall not exceed 11dBm/MHz

5725MHz-5850MHz: Shall not exceed 30dBm/500kHz

Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

RSS-247

Maximum Conducted Output power:

5250MHz-5350MHz: Shall not exceed 24dBm or 11dBm +10*log (-26dB Bandwidth (MHz))

5470MHz-5725MHz: Shall not exceed 24dBm or 11dBm +10*log (-26dB Bandwidth (MHz))

5725MHz-5850MHz: Shall not exceed 30dBm

Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

Maximum Power Spectral Density:

5250MHz-5350MHz: Shall not exceed 11dBm/MHz

5470MHz-5725MHz: Shall not exceed 11dBm/MHz

5725MHz-5850MHz: Shall not exceed 30dBm/500kHz

Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

Maximum EIRP:

5150MHz-5250MHz: Shall not exceed 23dBm or 10dBm +10*log (-26dB Bandwidth (MHz))

5250MHz-5350MHz: Shall not exceed 30dBm or 17dBm +10*log (-26dB Bandwidth (MHz)) (Above 23dBm Antenna pattern)

5470MHz-5725MHz : Shall not exceed 30dBm or 17dBm +10*log (-26dB Bandwidth (MHz))

Maximum EIRP Power Spectral Density:

5150MHz-5250MHz: Shall not exceed 10dBm/MHz

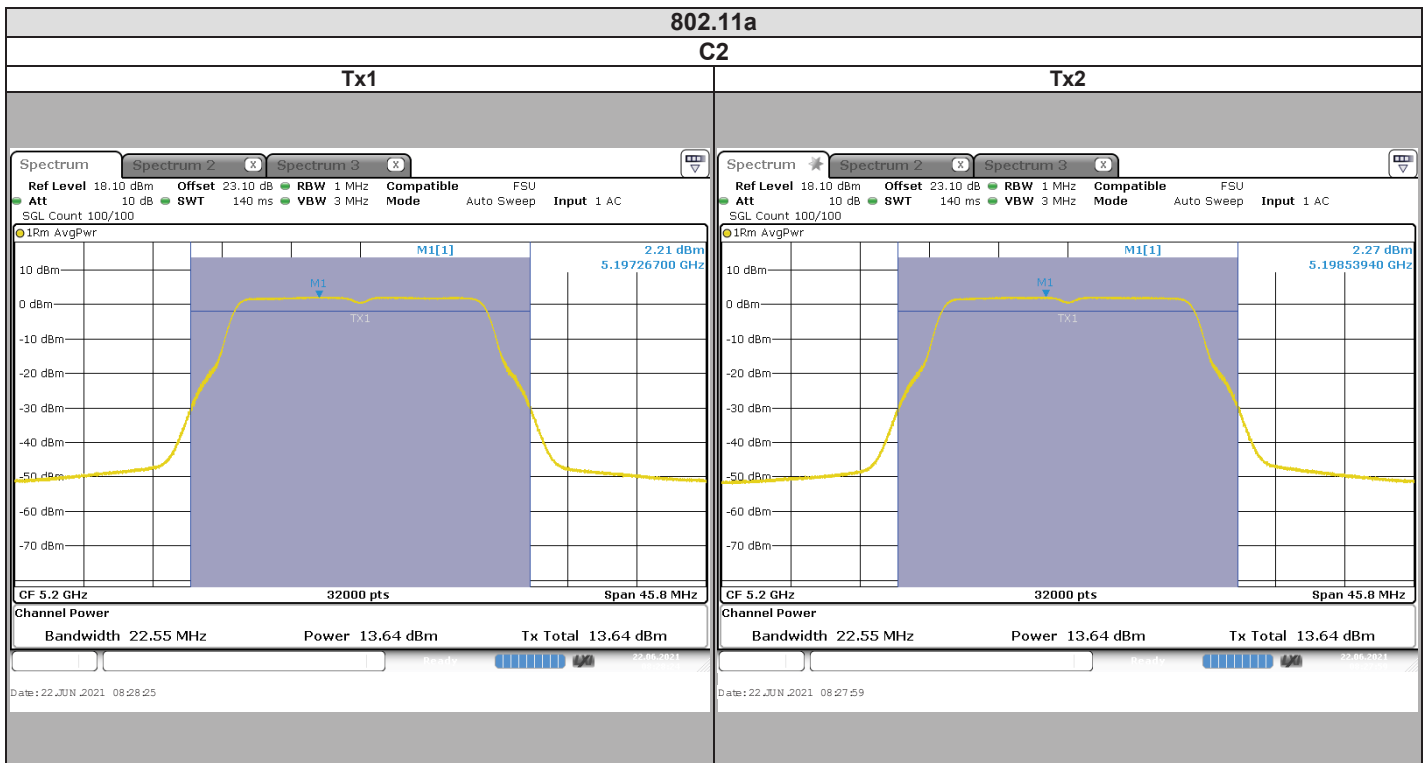
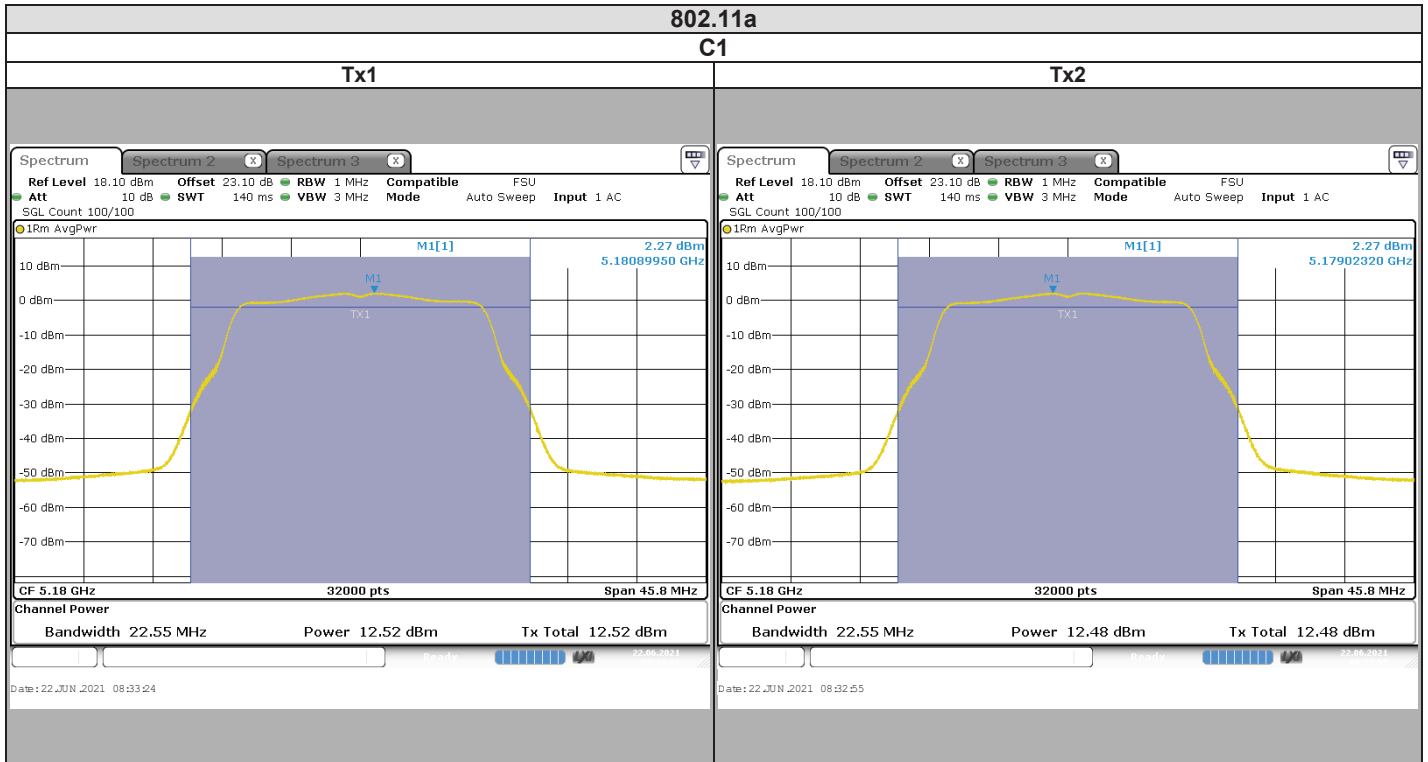


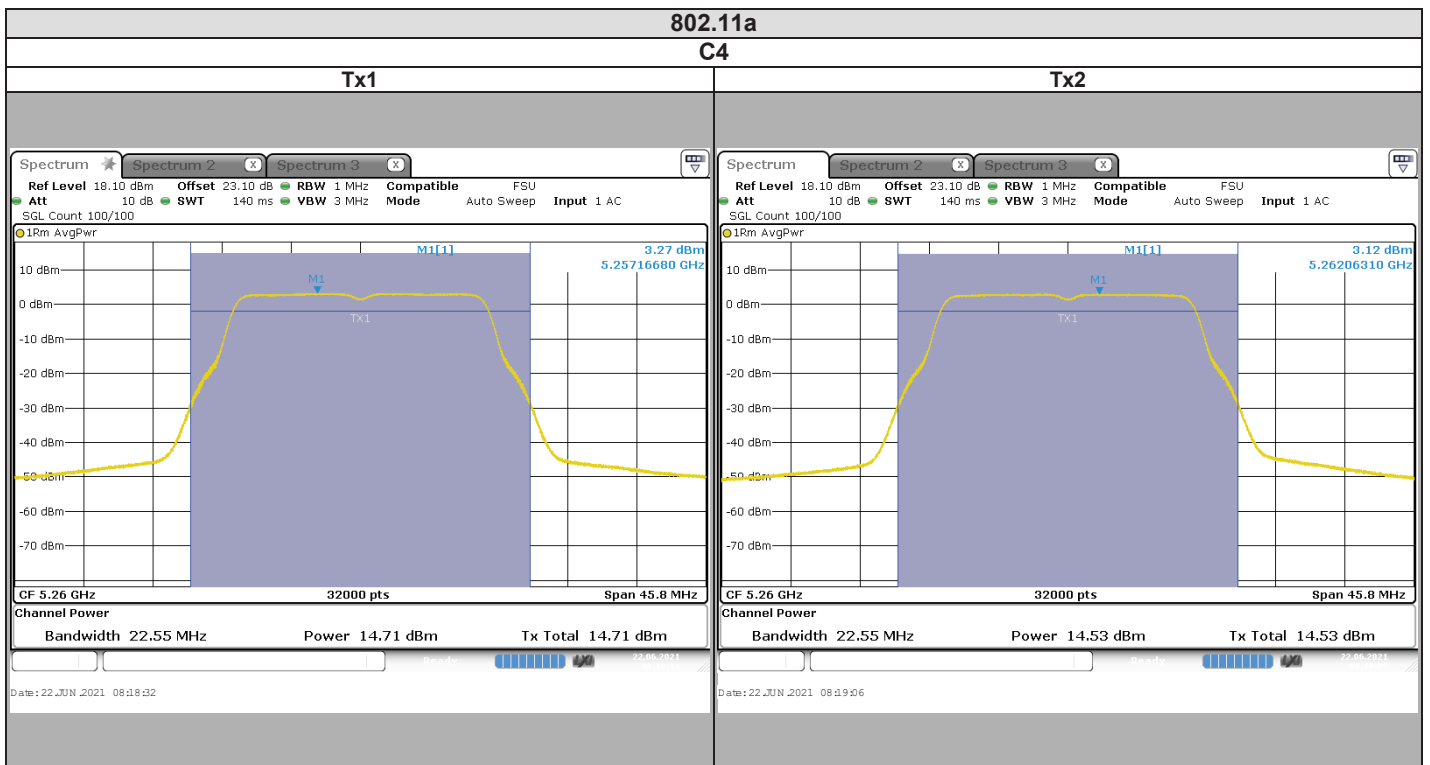
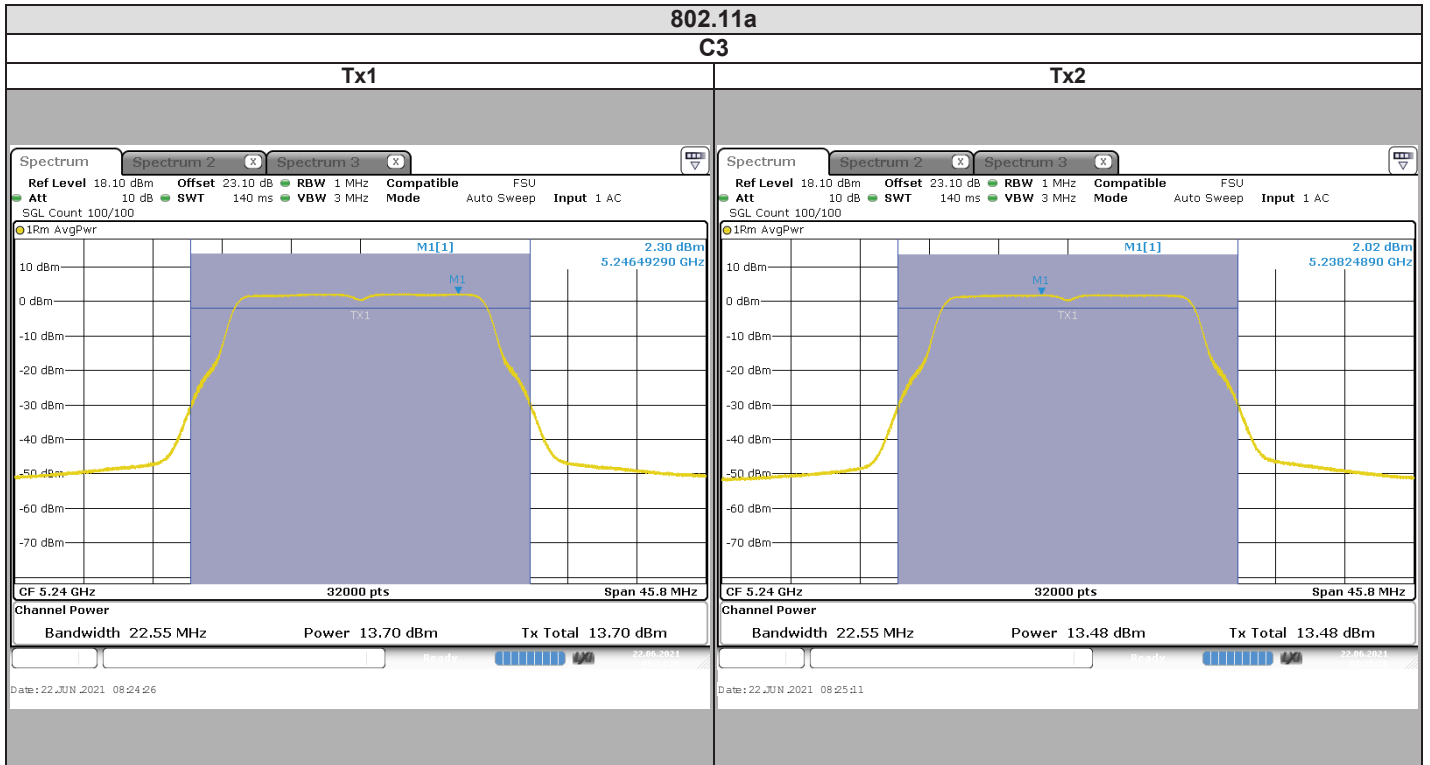
8.4. TEST EQUIPMENT LIST

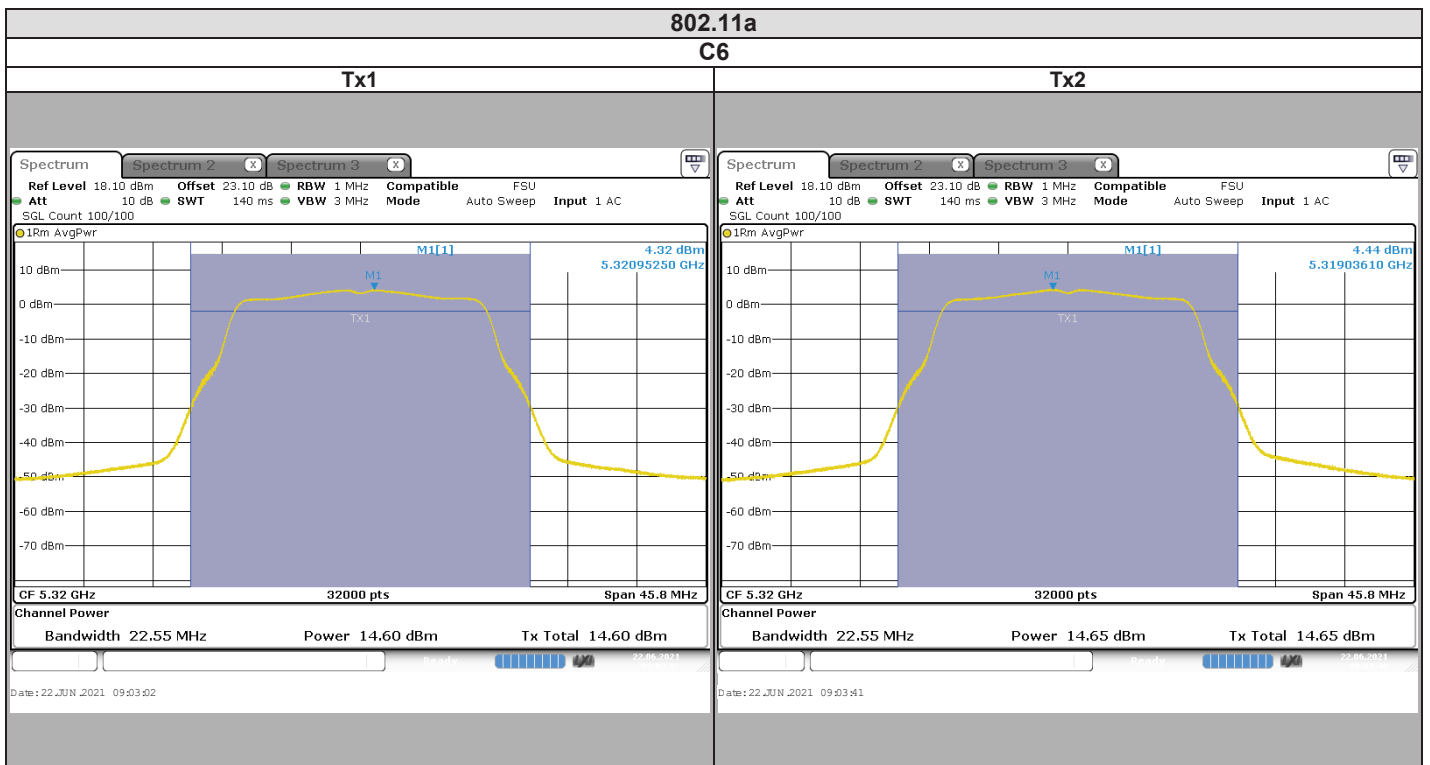
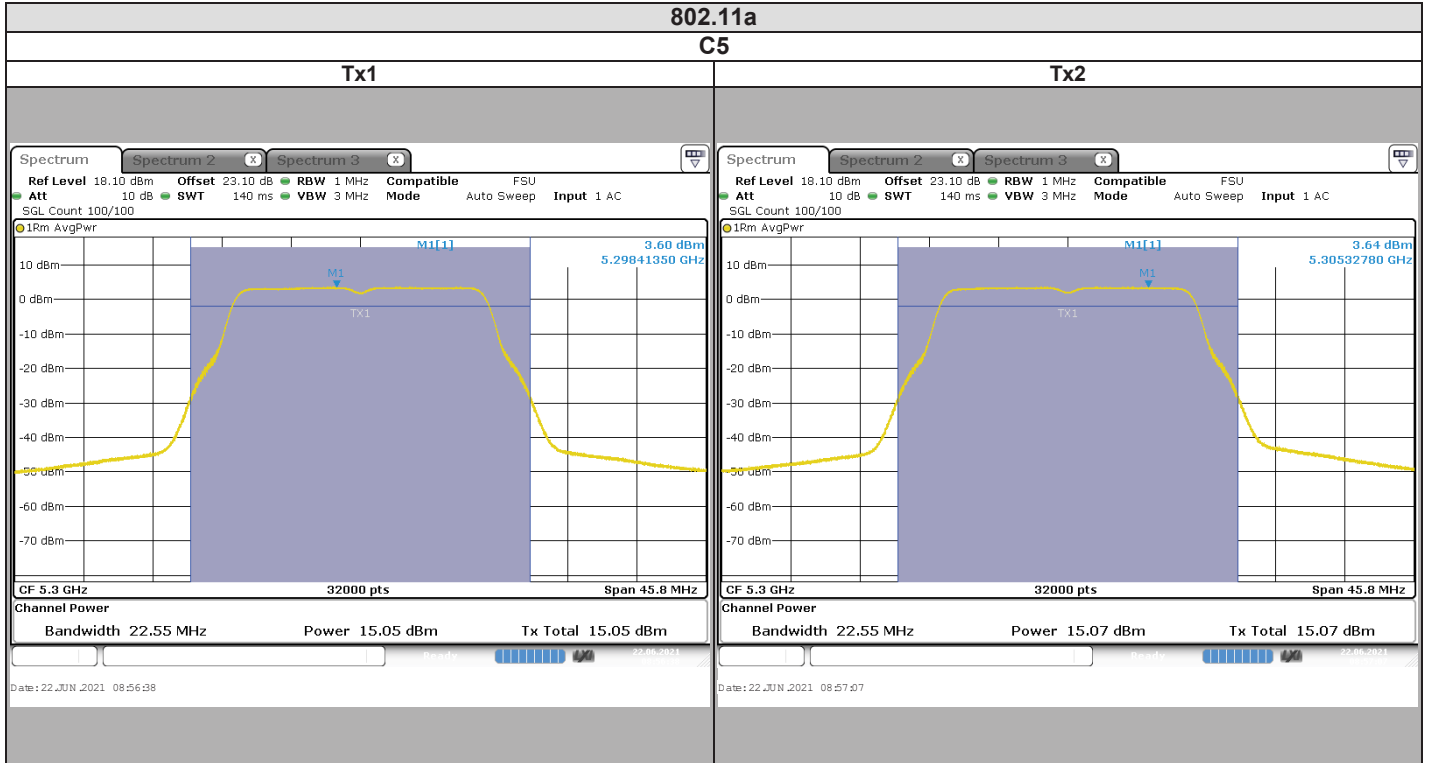
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2020/09	2021/09
Power supply	KIKUSUI	PCR500M	A7049006	See Multimeter	See Multimeter
Multimeter	KEITHLEY	2000	A1242090	2021/03	2023/03
R&S Commander Software	ROHDE & SCHWARZ	Version 1,6,4	-	-	-
Load 50 ohms	TELEGARTNER	-	A7150103	2021/04	2023/04
Load 50 ohms	TELEGARTNER	-	A7150104	2021/04	2023/04

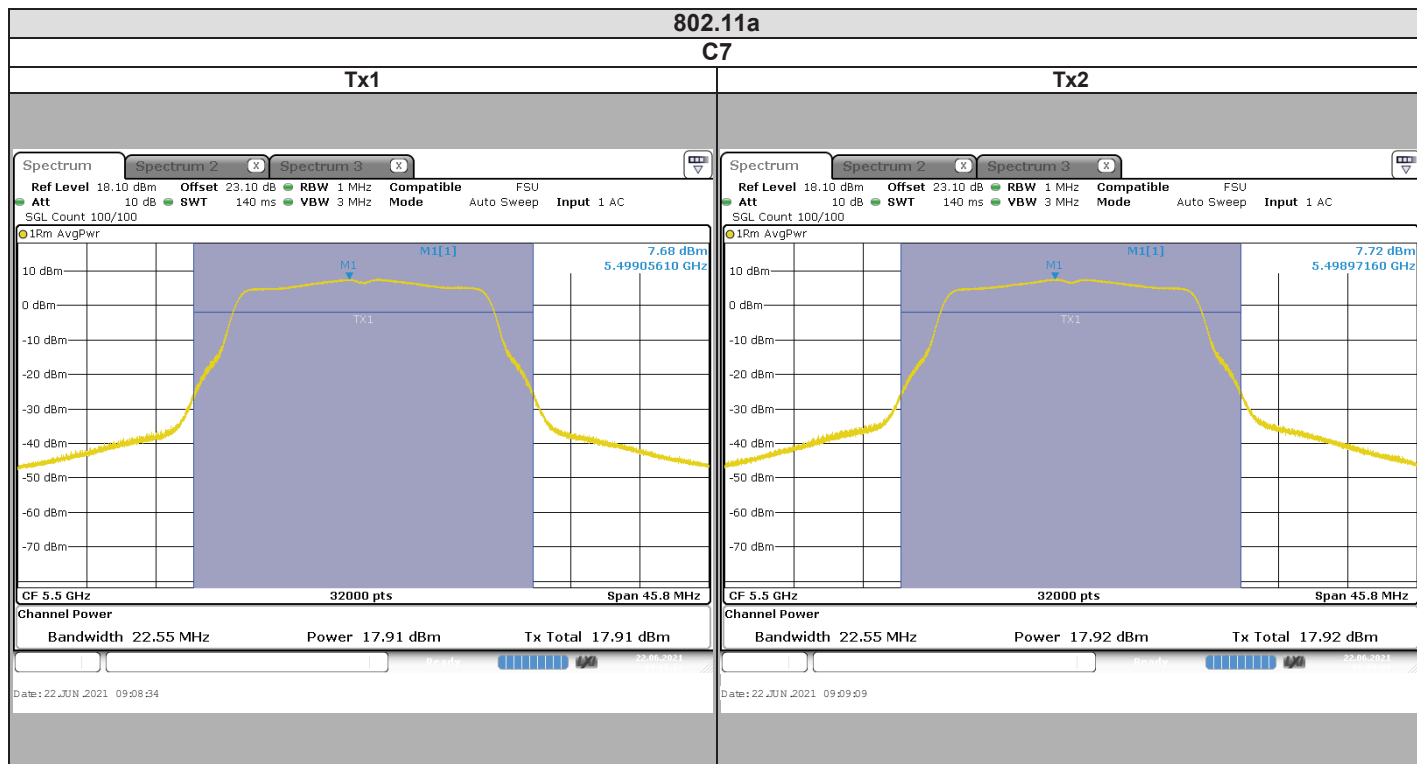
Note: In our quality system, the test equipment calibration due is more & less 2 months

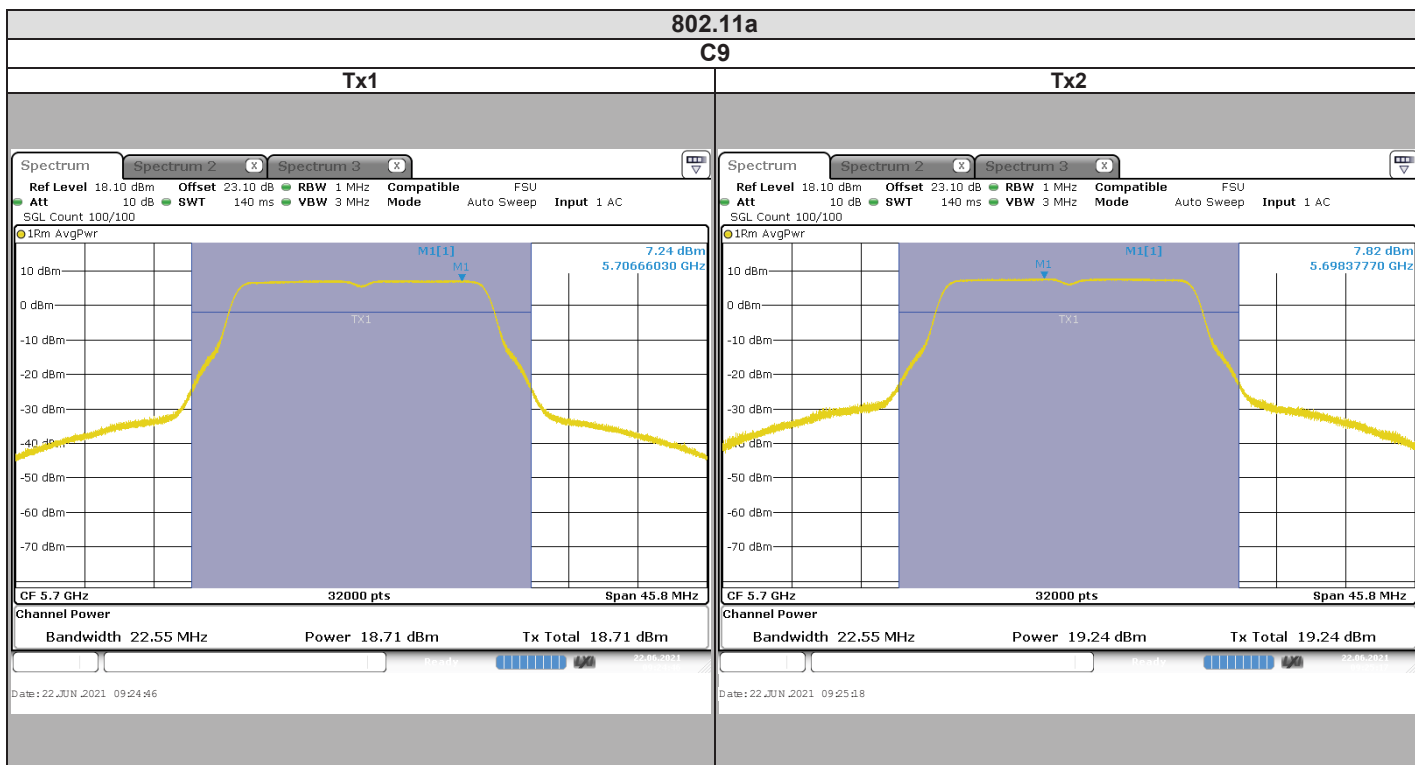
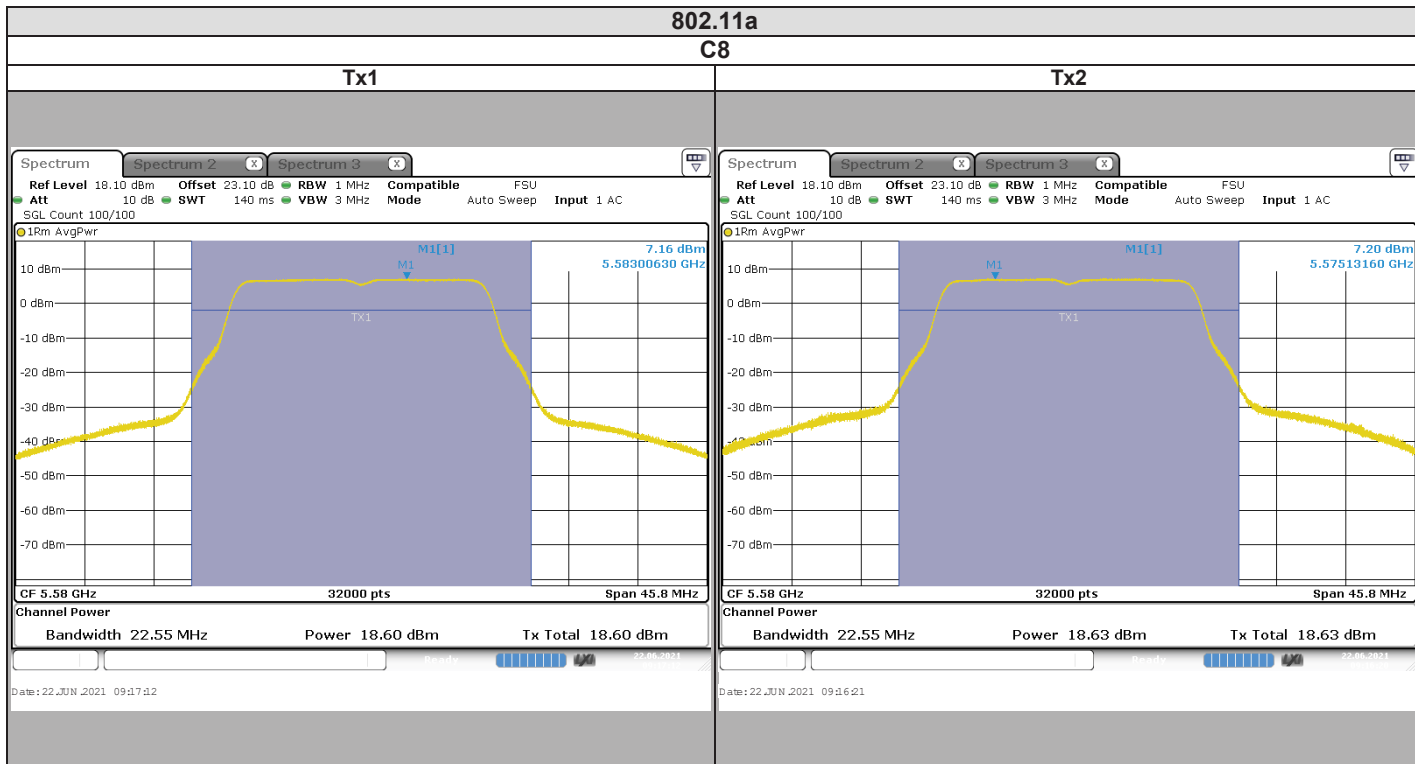
8.5. RESULTS

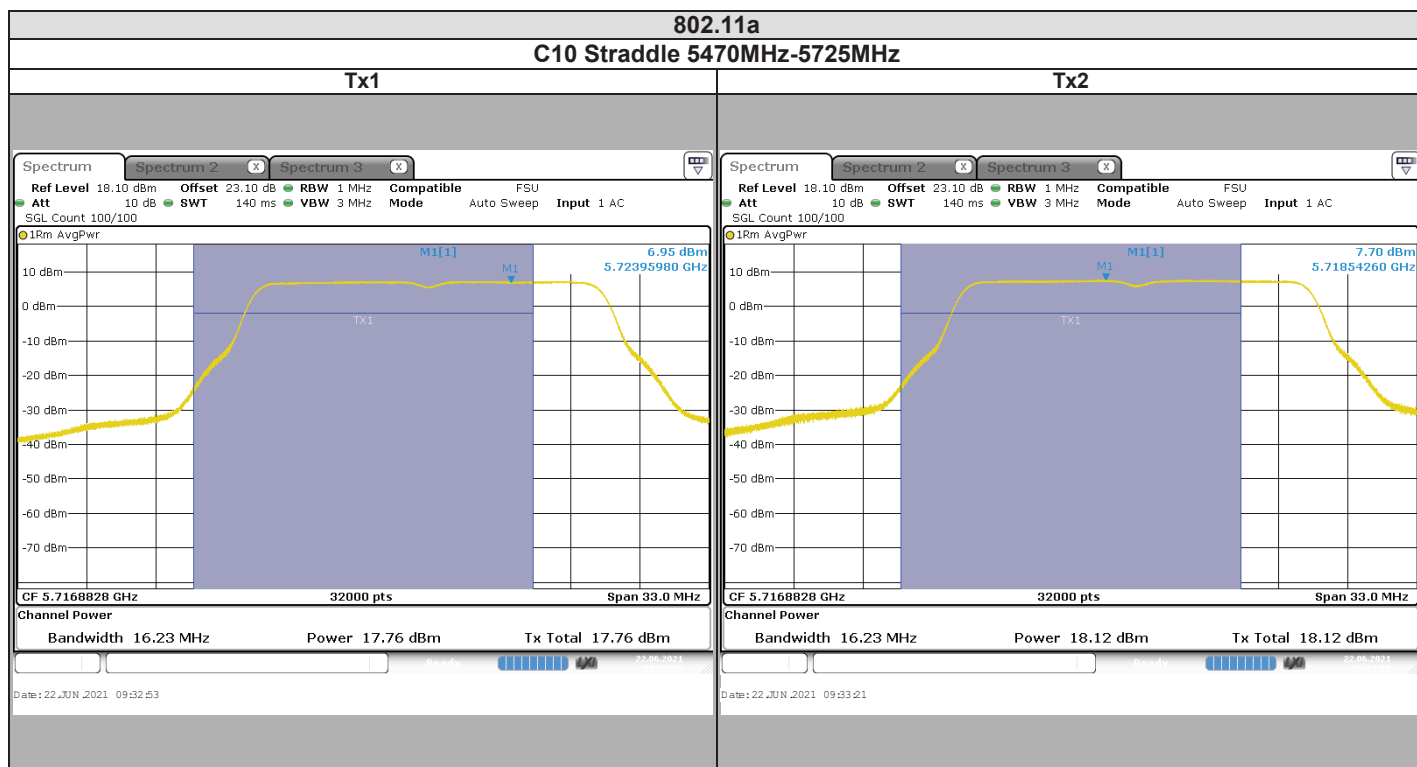


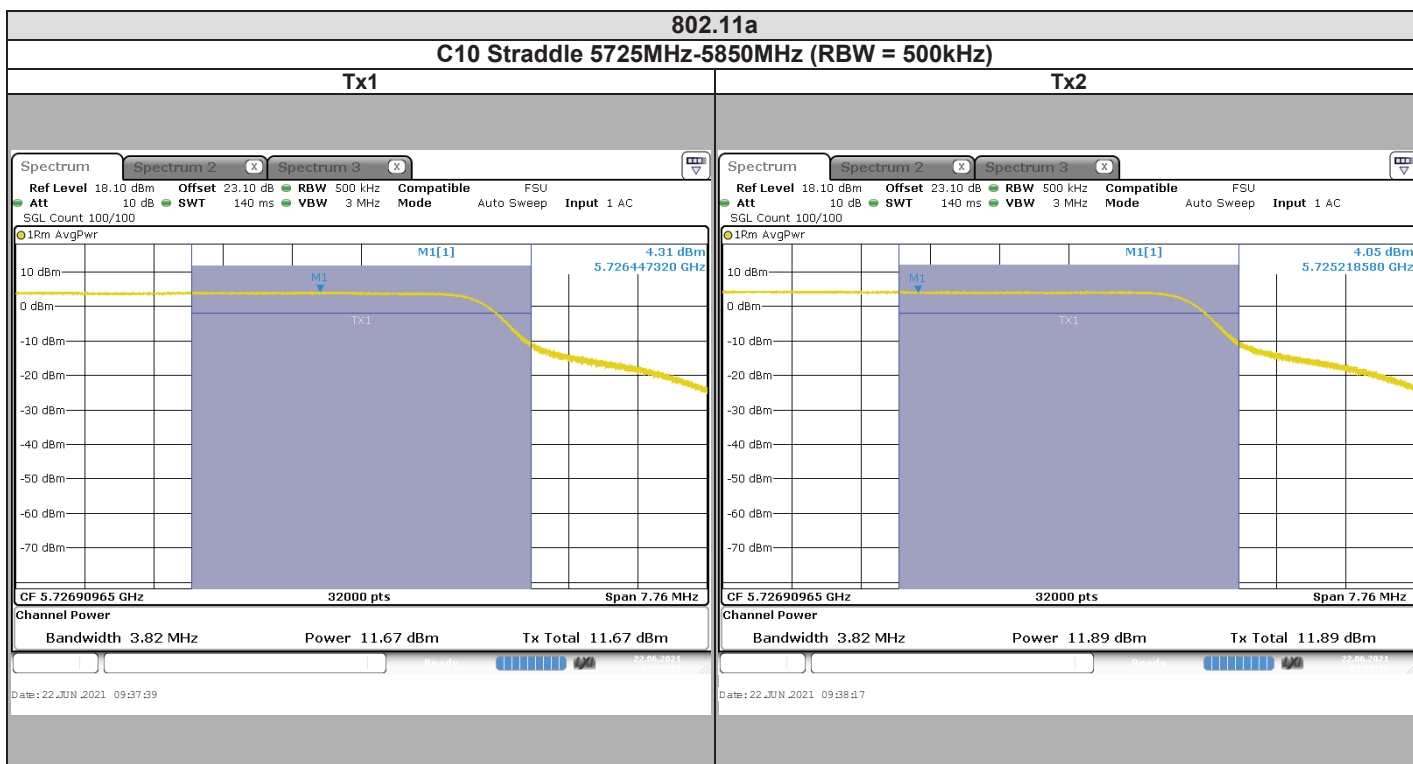
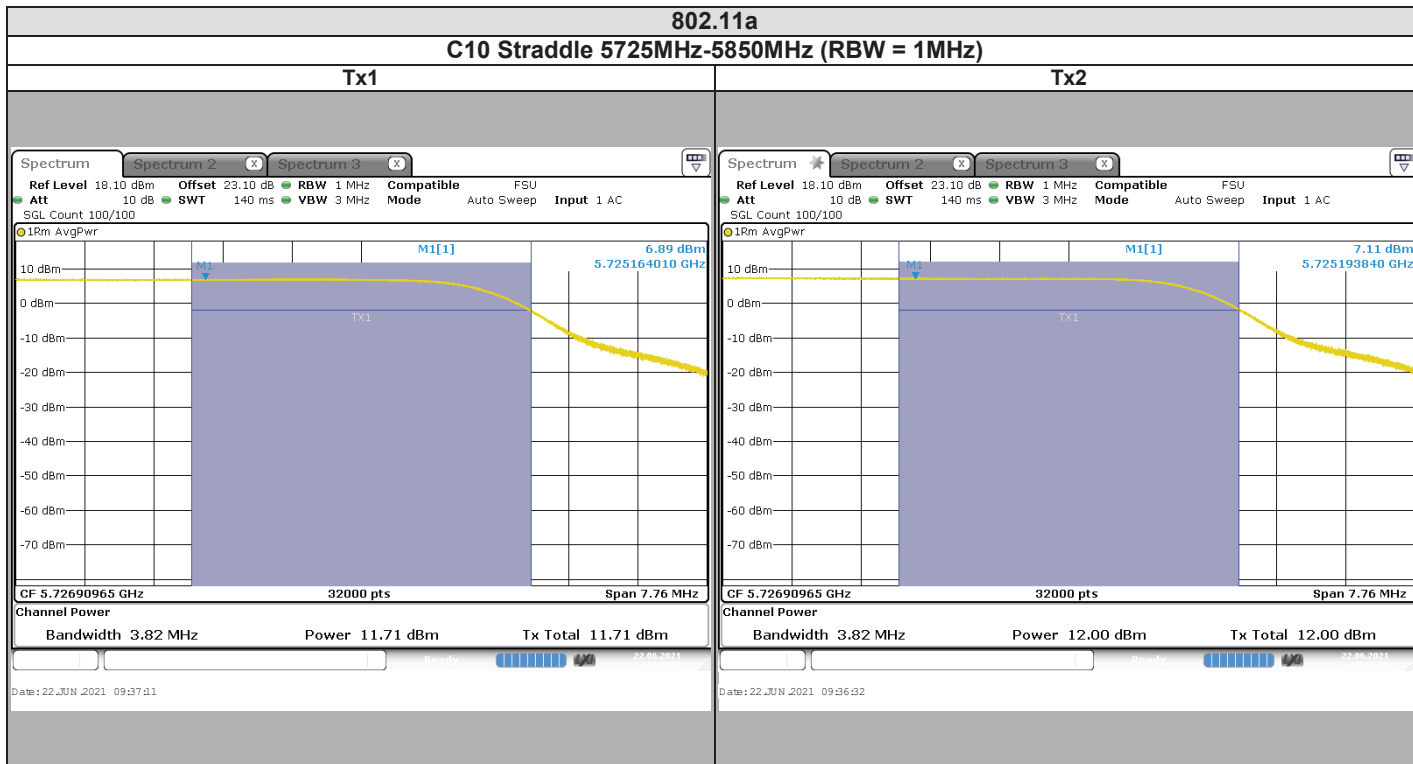


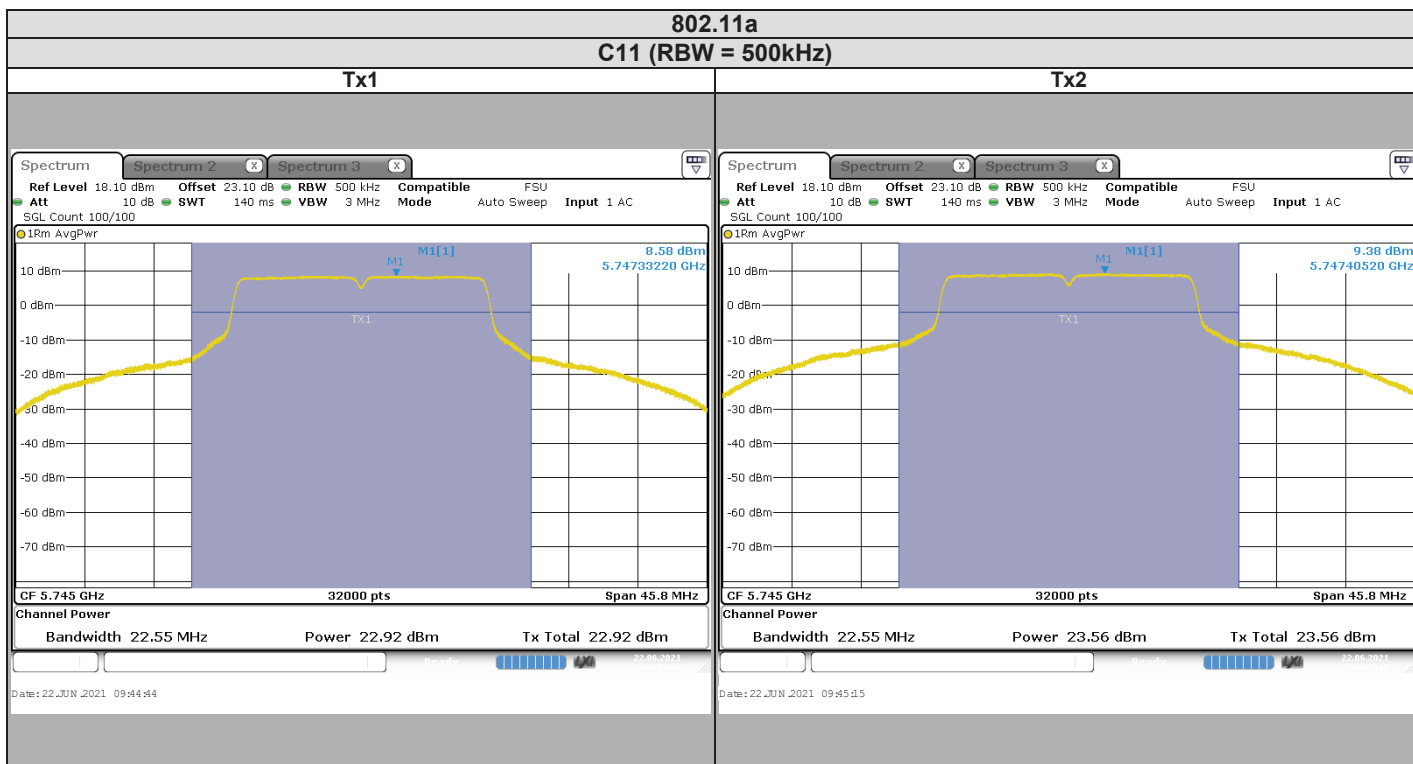
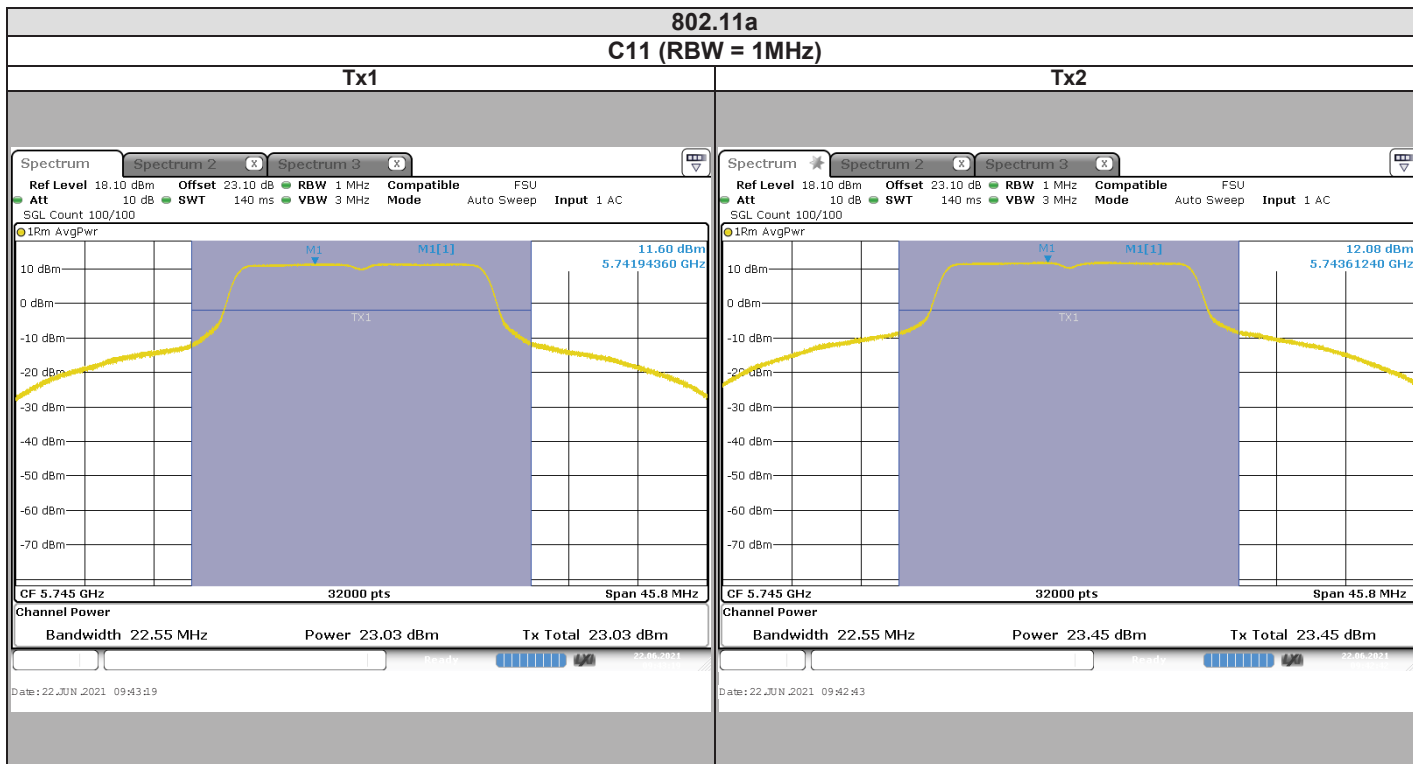


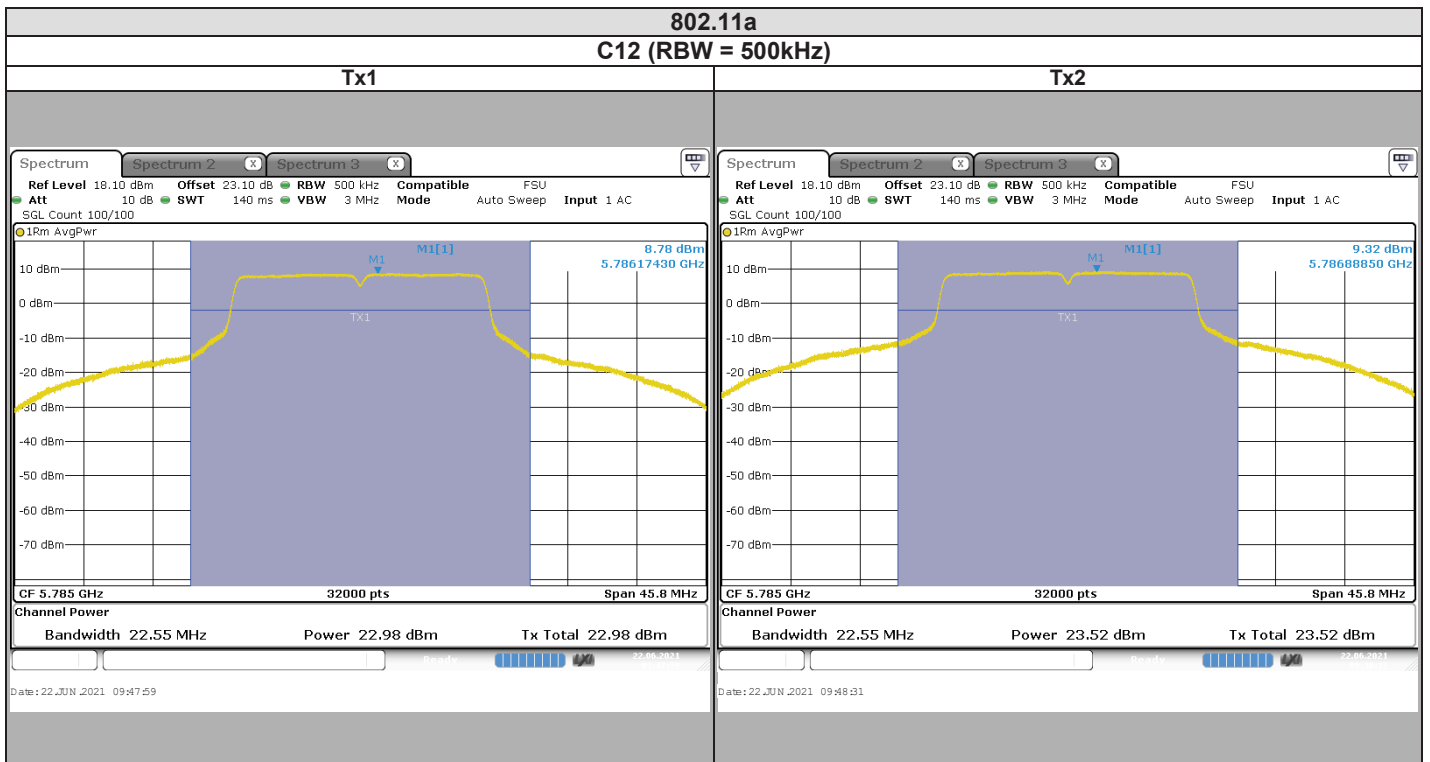
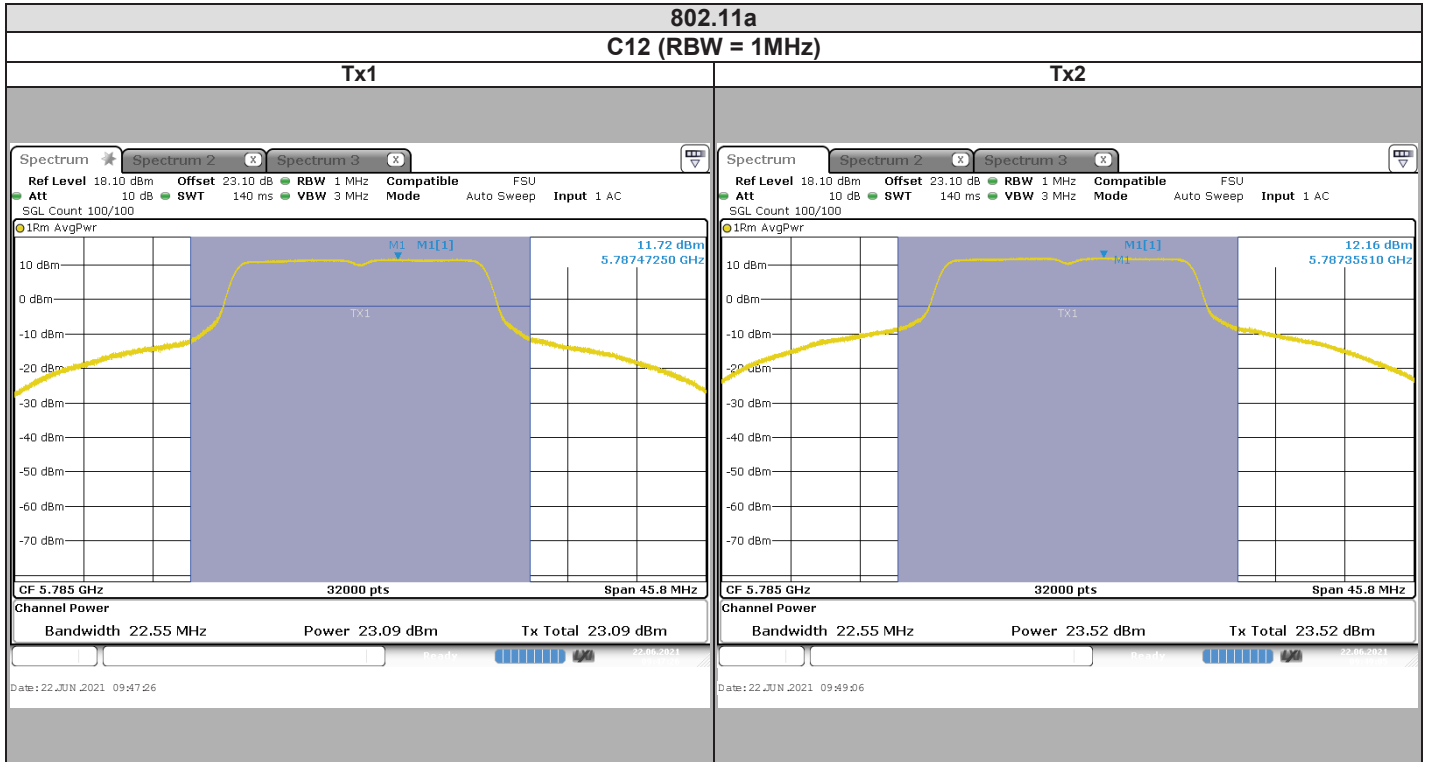


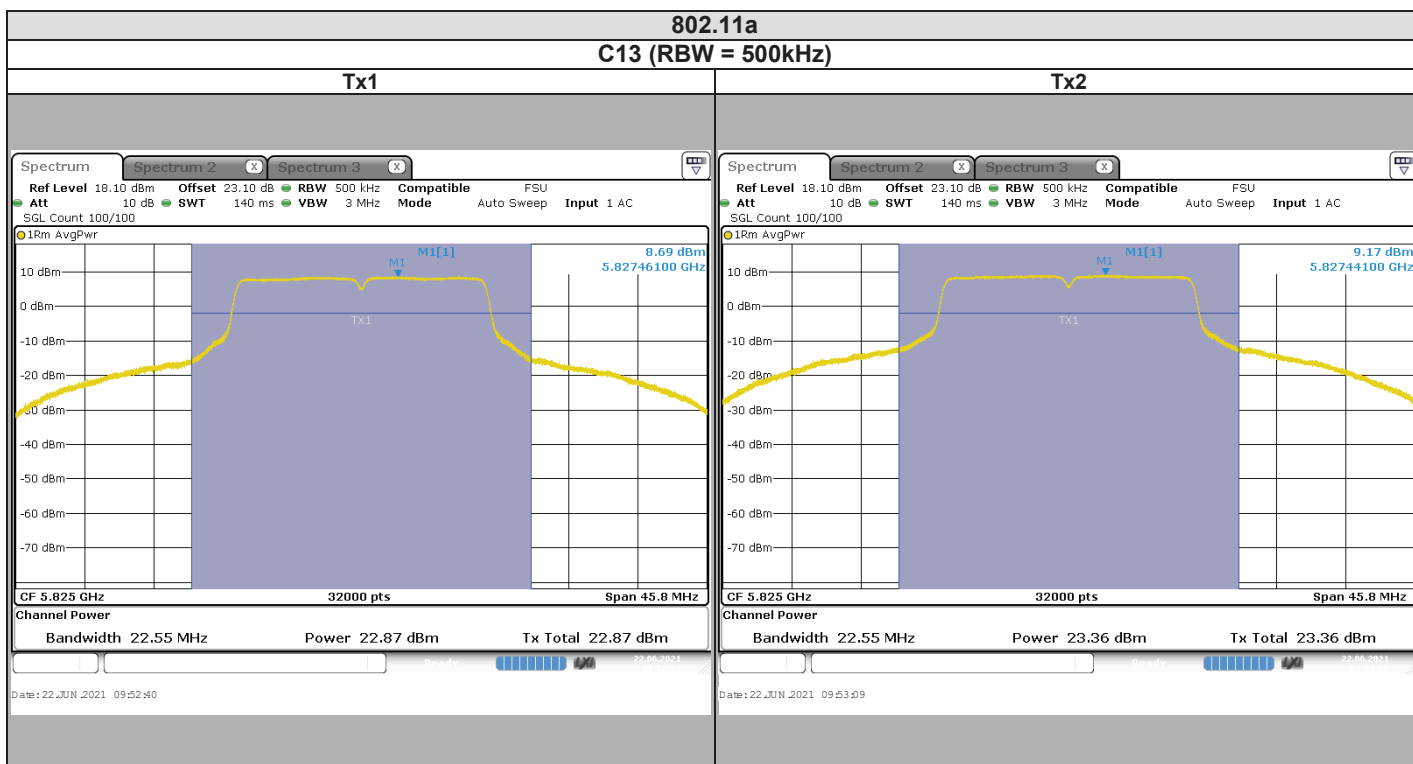
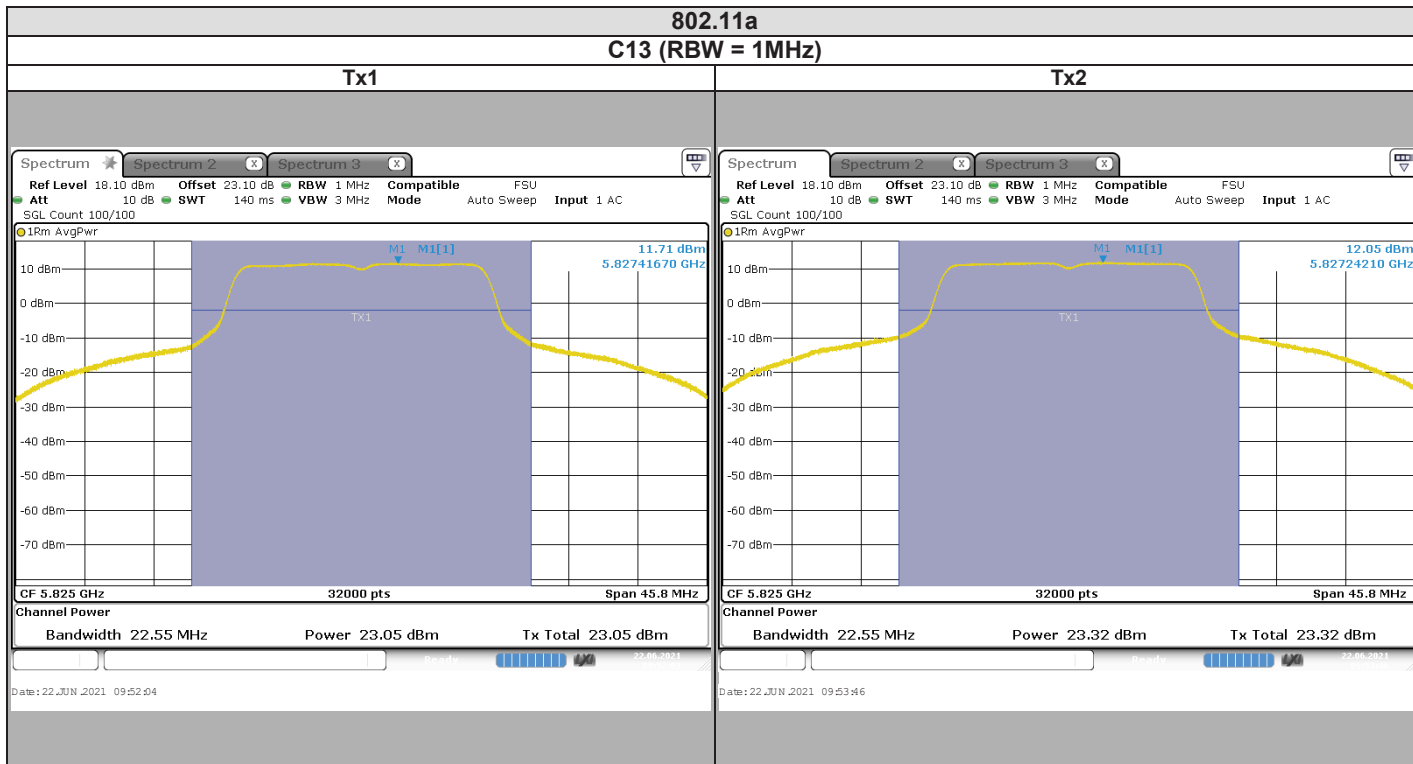


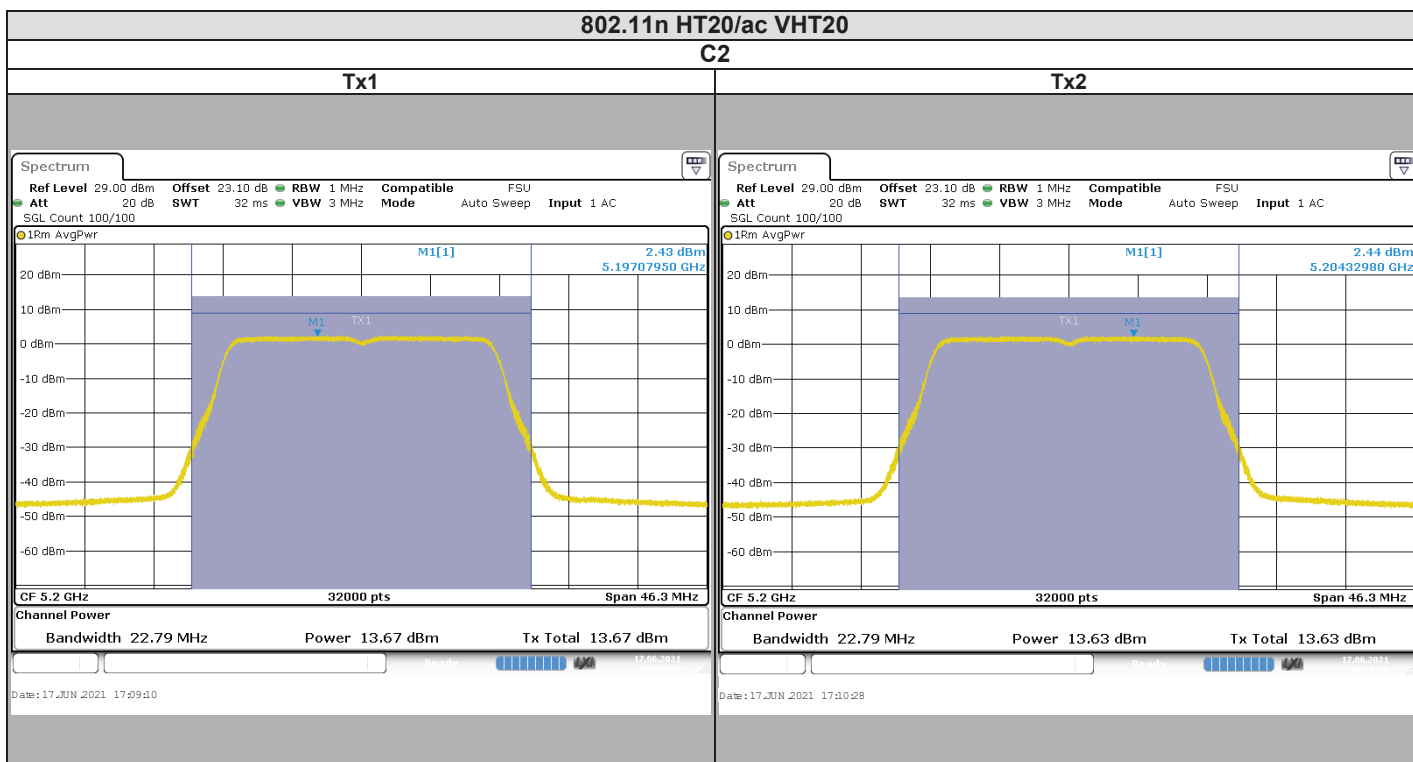
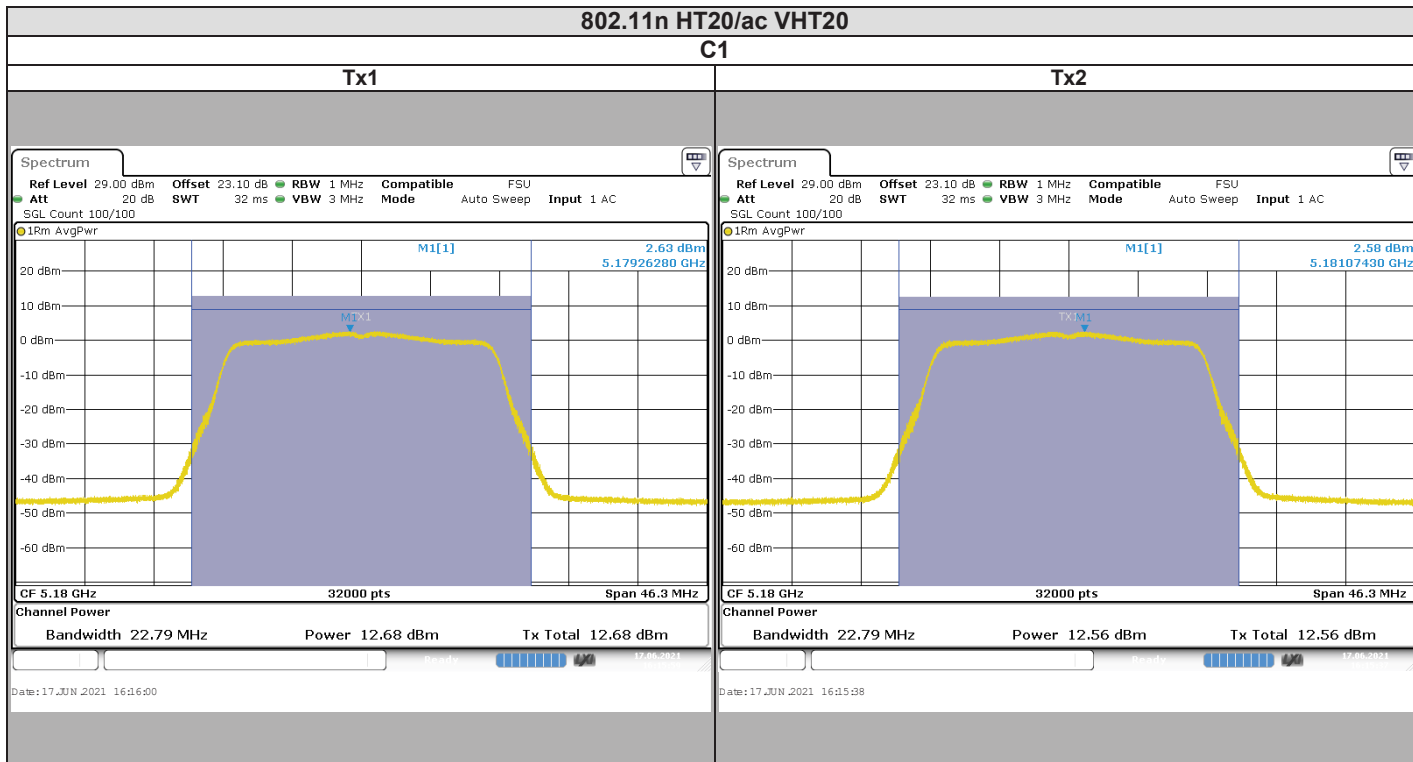


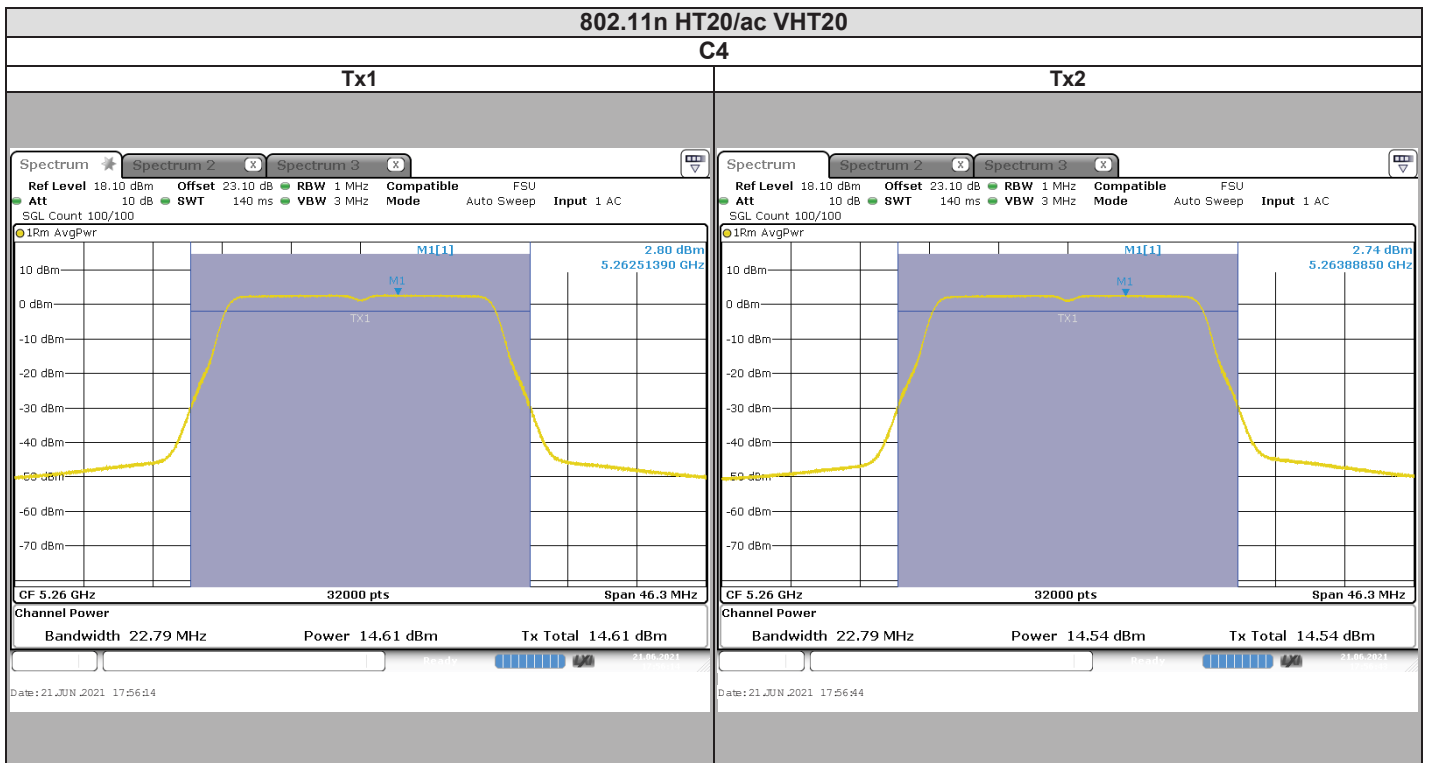
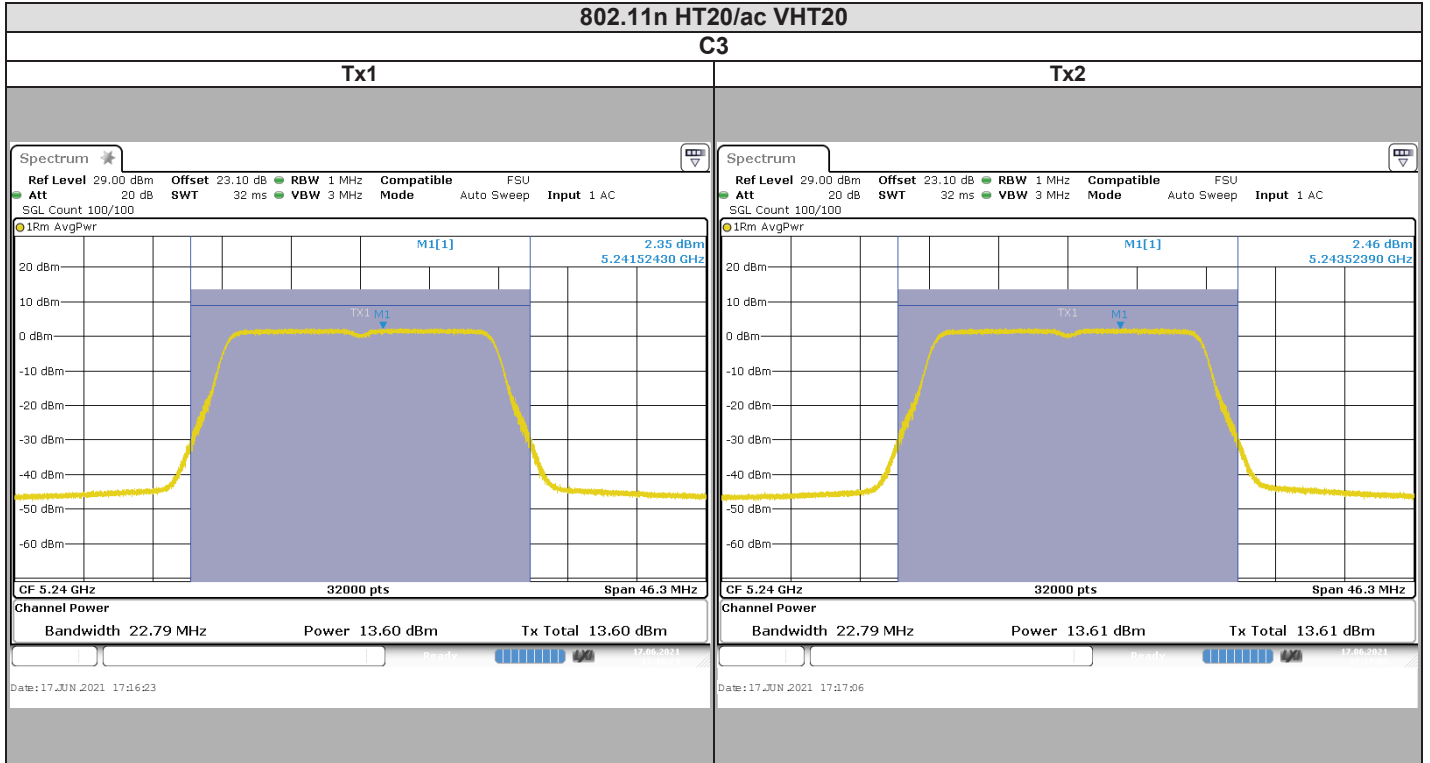






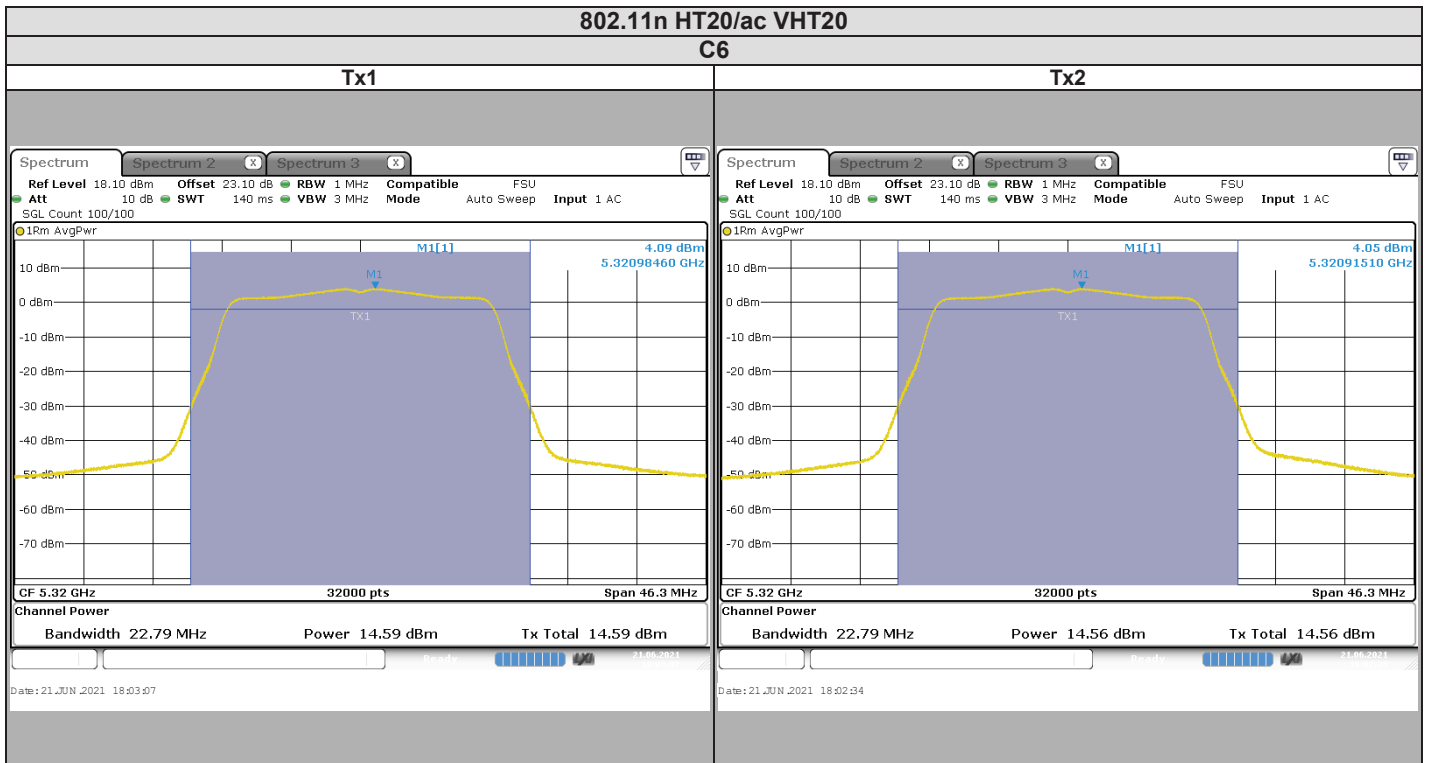
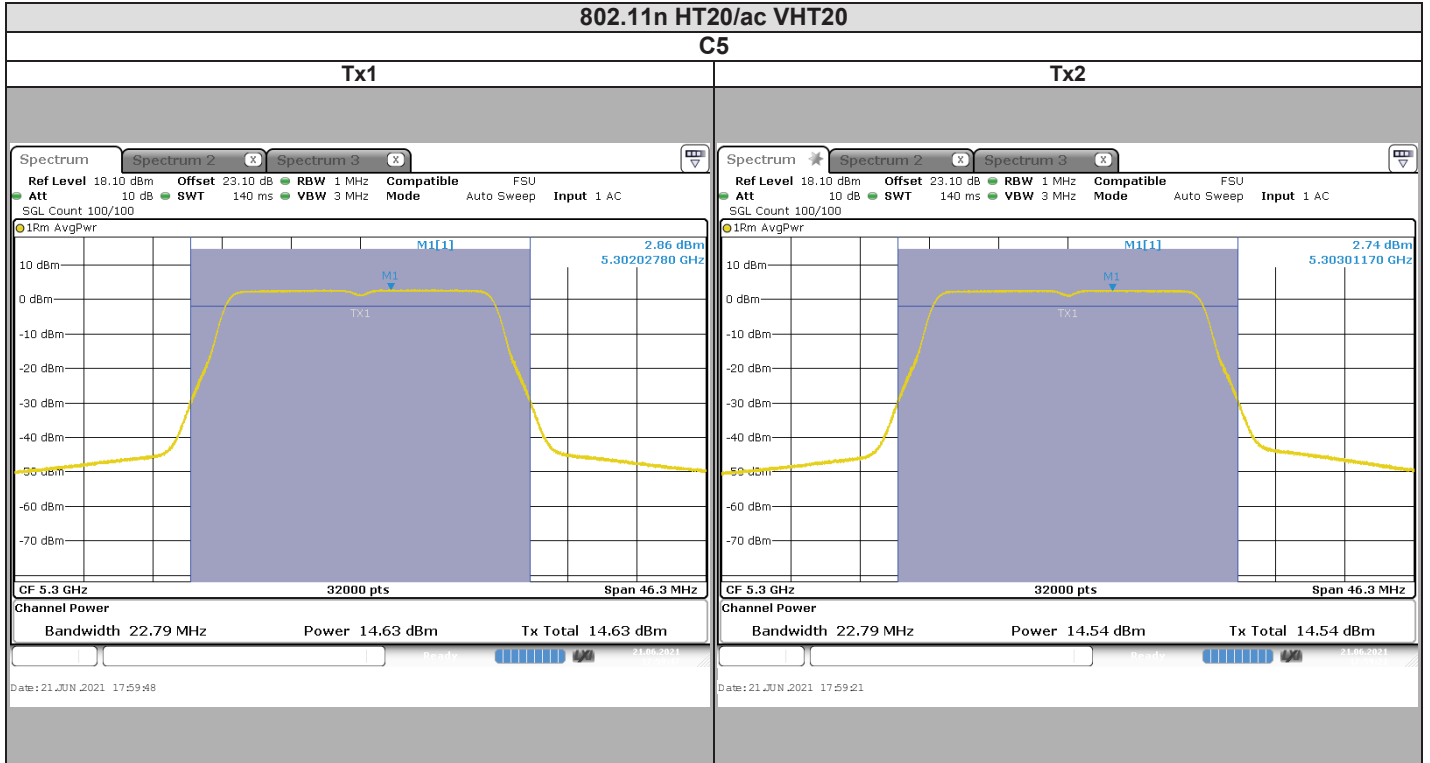








L C I E





L C I E

